# User's Guide Wing FTP Server Help

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# Part

# 1 Wing FTP Server

# 1.1 Overview

# Welcome to Wing FTP Server!

Wing FTP Server is a highly functional, easy-to-use and secure FTP Server solution that can be used in **Windows**, **Linux**, **Mac OSX** and **Solaris**. It supports a number of file transfer protocols, including FTP, HTTP, FTPS, HTTPS and SFTP using SSH2, giving your end-users flexibility in how they connect to the server. And it provides administrators with a web based interface to administer the server from anywhere. You can also monitor server performance and online sessions and even receive email notifications about various events taking place on the server. The supported transfer protocols are listed as follows:

- FTP (File Transfer Protocol)
- HTTP (Hyper Text Transfer Protocol)
- FTPS (FTP over SSL)
- HTTPS (HTTP over SSL)
- SFTP using SSH2 (File Transfer over Secure Shell)

The major features of Wing FTP Server:

- Cross Platform You can run the server on Windows, Linux, Mac OSX and Solaris.
- Multiple Protocols Supports FTP, FTPS(FTP over SSL), HTTP, HTTPS, and SFTP(FTP over SSH).
- FIPS 140-2 Uses OpenSSL FIPS 140-2 validated cryptographic module (certificate #1051).
- IPv6 Support You can add IPv6 listeners or IPv6 access rules like IPv4.
- Web-Based Administration Administrate your file server anytime, anywhere.
- Web-Based Client Access your files anytime, anywhere.
- Multiple Domains You can run multiple virtual servers on the same IP address.
- Task Scheduler Uses the Lua scripting tasks to appoint an action at a specified time.
- Programmable Event Manager Executes Lua Scripts, sends out emails and implements thirdparty software.
- Multiple Authentication Types XML files, ODBC database, Mysql database, LDAP and Windows Authentication (NTLM or Active Directory).
- Application Programming Interface Provides a set of APIs that can be called in Lua Scripts.
- Audit & Report All the transactions will be captured into a database, then you can analyze it and generate reports in real time.
- Virtual Directories Allows you to map virtual directories to physical directories, and you can also use UNC path or mapped drives for virtual directories.
- **Real-Time Information** Enables you to monitor your FTP server in real-time. You can monitor each user connected to your server and gather detailed information about them.
- Ratio, disk quota system Every user can be assigned individual disk quota, ratio and bandwidth.

• Multiple Languages - Now supports 13 languages - English, Français, Deutsch, Italiano, Nederlands, Português, Español, 简体中文, 繁體中文, 日本語, Ceský, Româna, Türkçe.

The Web Client contains basic functions similar to Windows Explorer and brings the following major features:

- Support for iPhone/Andriod This feature aims to help iphone or andriod users to enjoy easy and convenient access to files anywhere.
- Web Links Share your files with direct web links, you can also set the limit number of download and expiration date.
- Multiple Files Upload/Download You can upload or download multiple files at the same time.
- Thumbnail View Mode With this you can see small images representing the contents of any file without having to download the entire file.
- Online Text Editor This function enables you to view or modify a text file.
- **Picture Viewer** You can watch PNG, JPG, GIF, BMP photos with the picture viewer or play them as slide show.
- Zip/Unzip Files Zip or unzip files(folders) on the server, save your download/upload time.

For more information, please visit our official website: http://www.wftpserver.com/

# 1.2 Editions

#### Wing FTP Server Editions

Wing FTP Server is available in three different editions. They are designed to meet various needs of today's server administrators. We offer a Standard Edition with the basic functions and features, a Secure Edition which supports SSH and SSL, and a Corporate Edition which is designed for medium and large corporations with high volume file server traffic.

#### Standard:

Remote Web-Based administration
Web-Based client(HTTP)
Administrator console
Unlimited domains number
100 user accounts per domain
50 concurrent connections per domain
Support virtual directory mapping
Support transfer ratios and quotas
2-year free upgrade protection(includes minor upgrades and major upgrades)
Lifetime technical support

#### Secure:

200 user accounts per domain
100 concurrent connections per domain
FTPS (FTP over SSL)
SFTP using SSH2 (File transfer over secure shell)
HTTPS (Web client)
All features in the standard edition

#### Corporate:

Unlimited accounts number
Unlimited concurrent connections
Database storage of accounts via ODBC
Database storage of accounts via Mysql
Event Manager
Task schedulers with lua script
Windows Authentication (NTLM or Active Directory)
LDAP Authentication
All features in the secure edition

# 1.3 Requirements

To properly run Wing FTP Server on your computer, the following system requirements are recommended:

#### **Hardware**

- Memory: 128 MB of system memory (RAM)
- Display: SVGA(1024 x 768) or higher is required when using the administration program
- Disk space: 30 MB free hard disk drive space

#### Software

- Operating System: Windows 2000, Windows XP(32/64bits), Windows 2003(32/64bits), Windows Vista (32/64bits), Windows 2008(32/64bits), Windows 7(32/64bits), Mac OS X v10.4 or later, Linux(kernel 2.6.x), Solaris 10.
- Web browser for web administration: IE 6.0+, Firefox 1.5+, Google Chrome, Opera 9.1+, Safari 3.1+, etc...

## 1.4 Purchase

Wing FTP Server is shareware, you can evaluate it free of charge for 30 days. After 30 days, if you want to continue using it, you must register it and pay a registration fee. You can purchase Wing FTP Server online at http://www.wftpserver.com/order.htm. With your purchase, you will get email or livechat technical support for lifetime and 2-year upgrade protection (all updates can be downloaded for free within two years). For more information about purchasing Wing FTP Server, do not hesitate to contact us at sales@wftpserver.com

The license key will be sent from email address: support@wftpserver.com, please make sure your mail server won't block or filter this email address.



# Part

# 2 Quick Start

# 2.1 Quick Start Guide

We will help you setup Wing FTP Server in a few minutes.

#### Login

When installation of Wing FTP Server is completed, you may launch web browser with <a href="http://127.0.0.1:5466">http://127.0.0.1:5466</a> to start the web-based administration. Here, 5466 is the default listener port for web admin, you can change it during the installation process. (Microsoft Windows users can launch the administration simply by double-clicking the Wing FTP Server icon in the system tray or the Desktop)

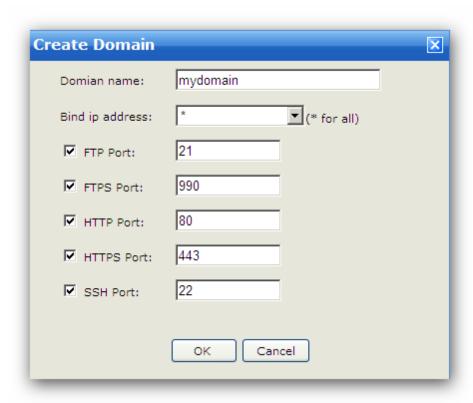


Enter your admin name and password which specified during installation, then click the "Login" button.

#### **Creating Your First Domain**

If there is no domain has been created, you will be asked whether you would like to create the first domain. Clicking "Yes" starts the domain creation dialog.

You need to specify the configuration as the picture shows below:



Firstly, you need to provide a unique name for the domain. It's simply an identifier to distinguish the domain from others. Please note that this domain name must be unique.

Secondly, specify the physical ip address used to connect to this domain. Normally you can choose the default asterisk(\*), it means server will use any available IP address on the computer.

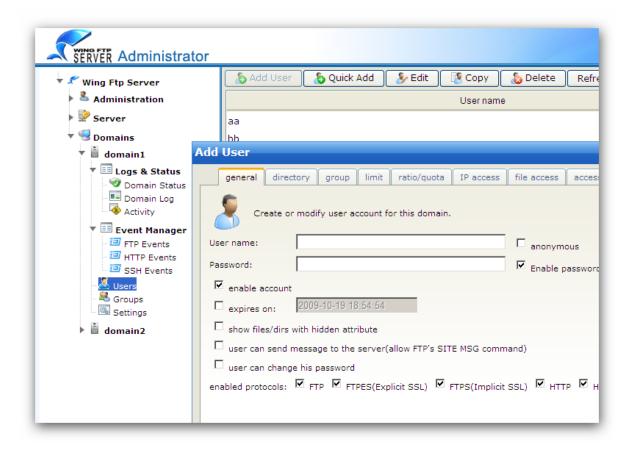
The last thing is to identify the available protocols and ports for this domain. The default setting will allow all the protocols. If you want to disable some protocol like "HTTP", just uncheck the "HTTP Port" box.

Click "OK" to finish the creation of new domain.

Now your first domain has been created successfully! It is so easy, right? And you may find its additional properties and settings under Domain Settings.

#### **Creating Your First User Account**

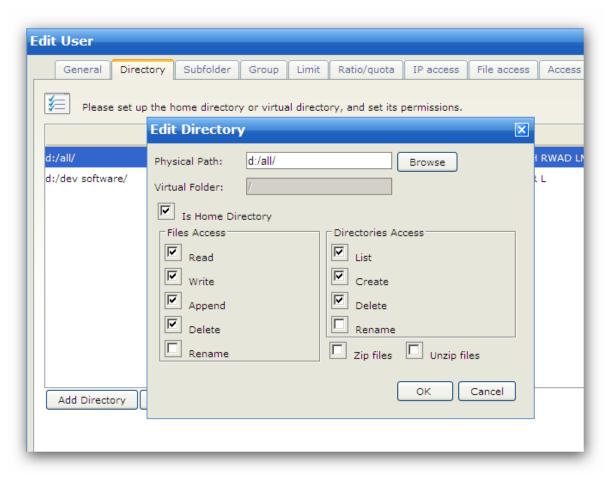
After your first domain is created, you need to add a user account for this domain. Navigate to "Domains -> YourDomain -> Users", then click "Add User" button.



You need to provide a unique user name for the user account. This user name is used to begin the authentication process when connecting to the server. The user name must be unique for this domain, in the meantime other domains on your server may have an account with the same user name. To create an anonymous account, check the anonymous box.

After specifying a unique user name, you also need to specify a password for the account. If you want to allow anyone who knows the user name to access your domain, just uncheck the option "enable password".

The last step is to add a home directory for this account. It is the location on the server's hard drive (or UNC network resource) where the user will be placed after successful login. Click "directory" tab in the User Creation Dialog.



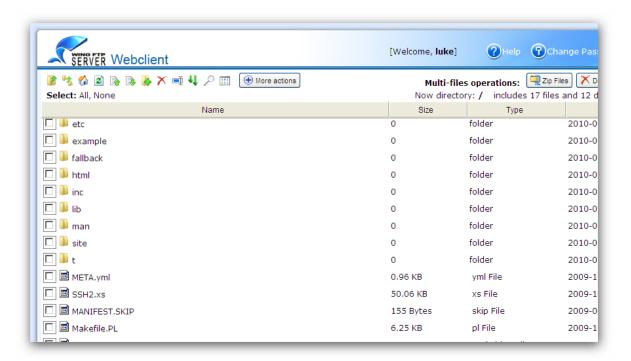
There is no directory available for newly created user account, so you need to add a directory for this user. Click "Add Directory" button, then choose a physical folder by clicking "Browse" button. The final step is granting access rights to this folder. The rights will be inherited by all subfolders contained in that folder. The default access rights are "File Read" and "Directory List", which allow user to list files (folders) or download files.

#### Test

Congratulations! Your Wing FTP Server is now accessible and ready for file sharing. If you've enabled HTTP protocol during the domain creation process, now you can test it with a web browser. Enter http://127.0.0.1:80 (80 is the default port for HTTP). You will be taken to the login page showing:



Enter the account name and password you just created and click "Login" button.



Now you can download and upload files in both home and virtual directories.

# 2.2 Router & Firewall

Configure Wing FTP Server with a DSL router or a cable modem.

#### Introduction

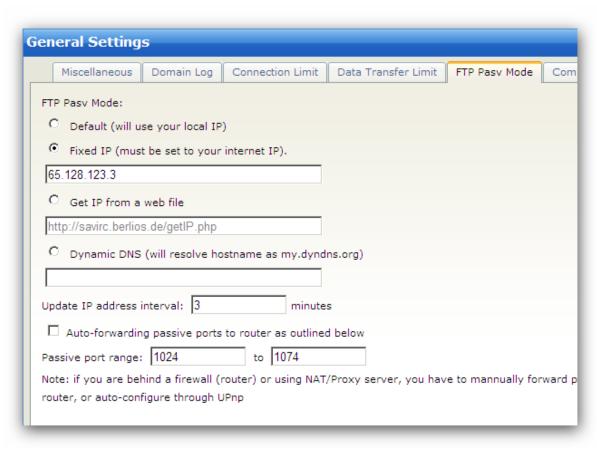
Wing FTP Server can be used in conjunction with a DSL router or cable modem by making a few adjustments in both the router/modem and Wing Ftp Server. The router needs to be reconfigured so that any inbound FTP traffic will be routed (or forwarded) to Wing FTP Server.

Suppose you have a DSL router or cable modem directly connected to the internet with a static IP address, which for our demonstration purpose is 65.128.123.3. You have one or more computers plugged into the router, and with an internal IP addressing scheme, typically based on 192.x.x.x. In our scenario, our internal LAN is based on 192.168.x.x and server computer has an IP address of 192.168.1.123. When outside users connect to Wing FTP Server, they need to configure their FTP client to point to 65.128.123.3, which is the IP address of the router.

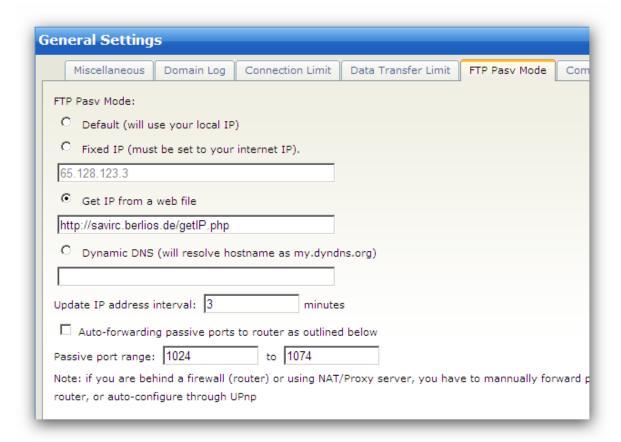
The router will monitor incoming FTP traffics and forward (route) that request over to the Wing FTP Server on IP address 192.168.1.123. Wing FTP Server will process the request, send the reply back to the router, which will then forward the information back to the FTP client.

#### Step 1 - Configuring Wing FTP Server

The following steps will guide you in configuring Wing FTP Server to work with your router. In the first step, you need to know the External IP address of the router. In this demonstration, we use 65.128.123.3.



If you don't know your External IP address or have a dynamic External IP address, you can get it from a web page for IP resolving(such as: "http://savirc.berlios.de/getIP.php").



- 1. Login to Wing FTP Server Administration.
- 2. Navigate to "Domains->Settings->General Settings".
- 3. In the tab pane of the FTP Pasv Mode, set the Passive Port Range values between 1024 and 1074 You can choose any number between 1024 and 65535, but we recommend that you limit the range to as few ports as you need. When a user lists a directory or uploads/downloads a file from your server, Wing FTP Server will use a port. Once the file transfer has completed, the port goes back to the available list for reuse. So if you only expect 10 people to download/upload files at the same time, you can limit your port range to about 20 or 30 ports. If you expect 100 simultaneous users, then 200-300 ports are recommended.
- 4. Enter the External IP address of your router in the field labeled Fixed IP. If you don't know your External IP or have a dynamic External IP, you can get it from a web page for IP resolving.
- 5. Click on the OK button to save the changes.

#### Step 2 – Configuring your router

The following steps will configure your router to work with Wing FTP Server. Our test scenario was based

on a LinkSys router, other routers may not have the same process. Please refer to the user's Manual of your router for instructions on configuring Port Forwarding features.

To continue this step, you need to know the Internal LAN IP address of the Wing FTP Server. In our scenario, we use 192.168.1.123.

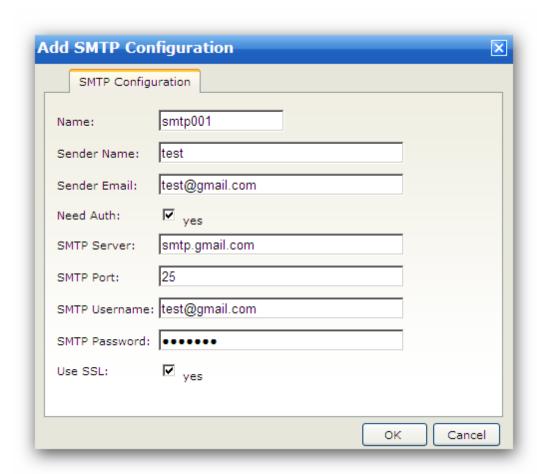
- 1. Launch the configuration program for your router. The configuration page for the demonstration router is web-based.
- 2. Configure the Port Forwarding feature of your router.
- 3. Forward Port 21 to your Wing FTP Server at IP 192.168.1.123.
- 4. Also forward the PASV Port Range specified in Step 1 to 192.168.1.123. This is necessary so that when the FTP client issues a PASV mode command to Wing FTP Server, the server will open a data channel for the client.
- 5. If you have Implicit SSL enabled on your Wing FTP Server, you may also want to forward Port 990 to 192.168.1.123.
- 6. Save the configuration and reboot your router. For some routers, you may need to switch off the power and restart again.

## 2.3 Email Notification

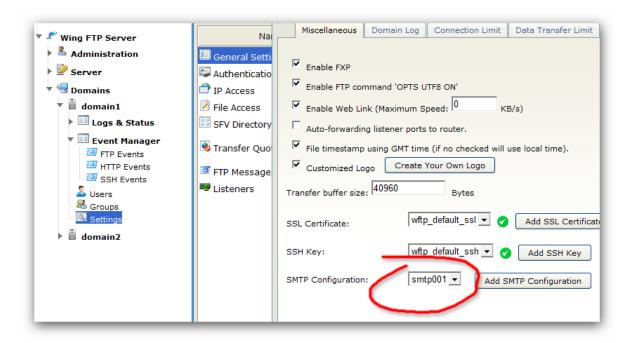
# You need to add an SMTP Server to enable email notification. It takes 6 steps to do this.

- Step 1: Click the "Add SMTP Config" button which can be found at "Domains->Settings->General Settings".
- Step 2: Enter your name in the Sender Name field.
- Step 3: Enter your full email address (e.g. test@gmail.com) in the Sender Email field.
- Step 4: Enter your SMTP Server address in the SMTP Server field.
- Step 5: Enter your email username in the SMTP Username field and your password in the SMTP Password field.
- Step 6: Tick the "Use SSL" box if your email server requires secure connection.

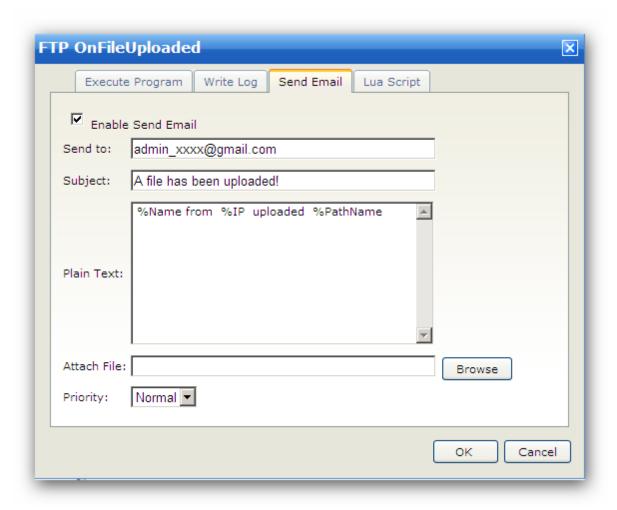
The picture below shows how to config with Gmail.



After creating a SMTP configuration, you need to select this configuration in the domain settings, like this:



Use Event Manager to send an email to a specified receiver. You can also specify the subject, priority, text and attach files.



## 2.4 Administration Console

Administration Console is a very useful tool for the administrators, like the Linux "Shell" or the Windows "Command prompt". You can run administration commands or Lua scripts on the console.

Wing FTP Server provides two types of consoles - the **Application Console** and the **Web-based Console**.

**Application Console** is an integral application of Wing FTP Server. You can run this application with the command prompt(or the Linux "shell") on the machine that is installed with Wing FTP Server. This application can be very useful when you are running Linux without GUI and you don't want to manage your server from remote web browser.

Open a command window(or Linux "Shell") and navigate to where Wing FTP Server is located, then start the program "wftpconsole" with the required parameters. If you are not sure how to do this, type command "wftpconsole --help" and you will see a list of all the allowed options like:

Allowed options:

```
--help Show this message
-u [ --username ] arg Username (Required field)
-p [ --password ] arg Password (Required field)
-h [ --host ] arg Remote host IP address,default is localhost
-P [ --port ] arg Remote host port,default is 5466
-f [ --file ] arg Parse and execute local Lua <file>
-s [ --ssl ] Use SSL connection
```

• Note 1: After successful connection to the local administration, please type the following command to log in:

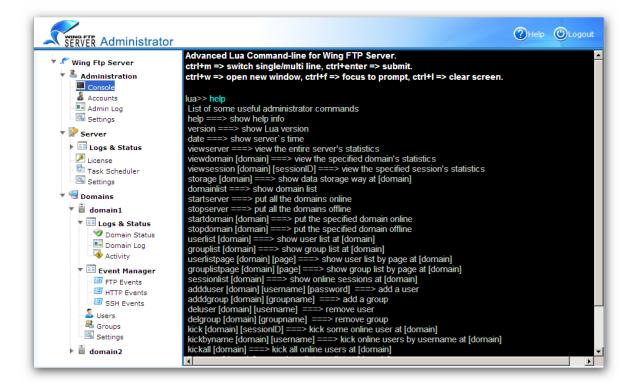
wftpconsole -u admin -p admin12345

- Note 2: The "lua>>" prompt indicates that you are in the Wing FTP Server administration and it is ready to receive your commands.
- Note 3: By entering command "help", you will get a list of useful administration commands.
- Note 4: You can input Lua script and execute it, like "print(1+2+3)".
- Note 5: Quit the console by typing "exit"

#### Web-based Console

Web-based Console is quite similar to the Application Console. It is located in the Web-based Administration. When you have logged on the Web admin, click on the left panel of "Administration -> Console" and the Web-based Console will appear on the right panel.

Type the "help" command, then you can see a list of administration commands.



Type the "domainlist" command to get the domain list on your server.



Type the "userlist" command with a specified domain name to get the user list for that domain.

```
lua>> userlist domain1
aa
bb
cc
dd
```

#### **Lua Scripts**

Apart from the Administration commands, Lua scripts can also be run here. With Lua scripts, the Administration Console works like a Lua Interpreter.

```
lua>> print (3+5)
8
```

```
lua>> for i=1,20 do print(i) print(" ") end
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
```

There are lots of Server APIs and Variables available for your scripts.

```
lua>> print(c_GetAppPath())
C:\dev\ftpserver\debug\

lua>> print(c_GetUserList("domain1"))
aa
bb
cc
dd

lua>> print("%ServerName %ServerVersion %CurrentTime")
Wing FTP Server Corporate Trial 3.0 Wed, 01 Jul 2009 16:17:17 GMT
```

You can switch the Single/Multiple line mode by clicking the icon before the "lua>>" prompt or by pressing "Ctrl + M".

Single Line: Iua>>

Multiple Lines:

Press "Ctrl+Enter" to submit your multi-lines Lua Scripts code.

```
lua>> print(c_GetAppPath())
lua>> for i=1,20
lua>> do
lua>> print(i)
lua>> print(" ")
lua>> end
lua>>
C:\dev\ftpserver\debug\1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
```

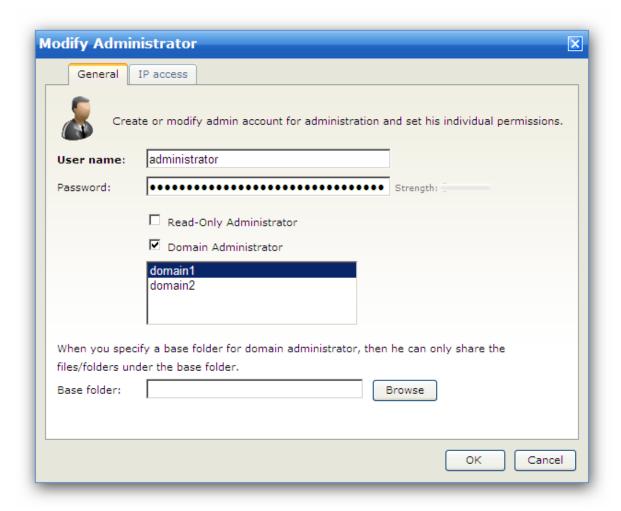
# Part IIII

# 3 Administration

# 3.1 Admin User

An Admin User account is required to administrate your server.

# **General Page**



#### **User Name**

#### **Password**

Password is required for a session to be authenticated with the Server. A strong password contains at least 6 characters including a mixture of upper-case and lower-case letters and at least one number. Restrictions can be placed on the length and complexity of passwords through limits configuration.

#### **Read-Only Administrator**

If enable the option "Read-Only Administrator", then that administrator can only view server settings and can't change server settings.

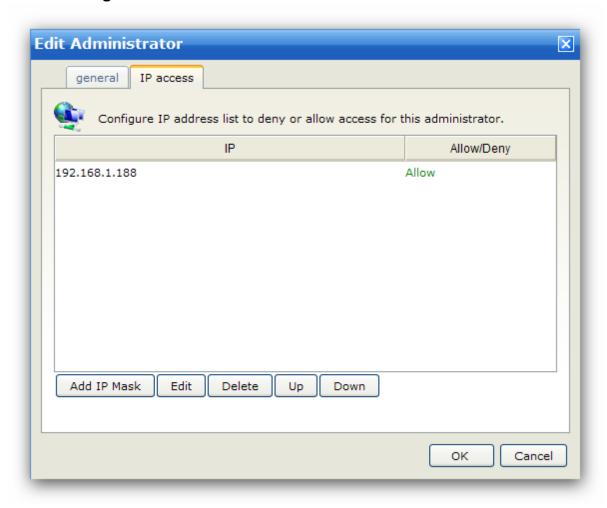
#### **Domain Administrator**

If enable the option "Domain Administrator", you must select one or more domains below, then that administrator can only administrate the selected domains (manage users, groups or activities).

#### Base folder

You must enable the option "Domain Administrator" first, then you can specify a base folder for that domain administrator, then he can only share the files/folders under the base folder.

# **IP Access Page**



You can define IP access rules to allow/deny users' access based on IP address for this administrator.

If you do not specify an IP address, the administrators can logon the server with any IP address. But if you set an allow list, the administrators can only obtain access by IP addresses specified in the list. If you set a deny list, the administrators can have access to the server by any IP address except those specified in the deny list. **The order of the rules is also very important.** 

For example:

#### Allow 192.168.1.188

Refuse this administrator's connection from any IP except 192.168.1.188.

#### Deny \*

Allow 192.168.1.188

Refuse this administrator's connection from any IP, since 192.168.1.188 after \* impacts nothing.

#### Administrator from local host

Remember whatever IP rules you added, administrators can always logon from the local IP address 127.0.0.1

So if you want to disable remote control from this administrator, just add rules like this:

Deny \*

#### Rule list

The Rule list shows the current list and the order of IP rules. Rules can be added or removed from the list using the Add and Delete buttons.

Also, the order of the rules may be altered using the Up and Down buttons on the right of the rule list.

#### Supported wildcards

IP address ranges and wildcards are supported by Wing FTP Server, as below:

#### XXX.XXX.XXX

IP address must be exactly matched(e.g. 192.168.1.1).

#### xxx.xxx.xxx.yyy

A specified range of IP addresses, e.g. 192.168.1.10-25.

```
*.*.* or xxx.*.* or xxx.xxx.*.* or xxx.xxx.xx
```

Any valid IP address value (For example, 192.168.\*.\* represents any IP between 192.168.0.0 and 192.168.255.255).

# CIDR convention is also supported:

 $192.168.0.0/24 \ (represents \ any \ IP \ between \ 192.168.0.0 \ and \ 192.168.0.255),$ 

218.123.2.1/29 (represents any IP between 218.123.2.1 and 218.123.2.9)

# 3.2 Admin Log

Here you can check logged administration activities.



#### **Pause**

Click this button to temporarily pause log refreshing. This function is useful for busy systems that a certain section of the log can be highlighted and copied before it is scrolled out of view. Once finished, click this button again to resume automatic updating of the log.

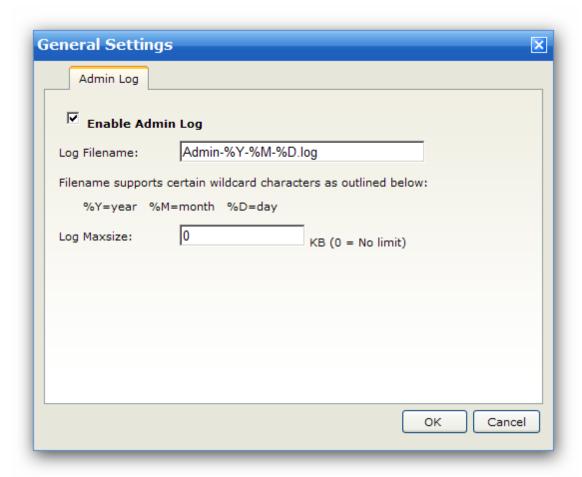
#### Filter Log

To quickly find and read through specific sections of the log, log filter is implemented based on search strings. Clicking this button brings up the Log Filter dialog. Providing a search string and clicking the Filter button refreshes the log to only display log entries containing the search string. To see the entire contents of the log again, open the Filter Log dialog and provide an empty search string.

# 3.3 Setting

# 3.3.1 General Settings

Here you can configure settings for admin log.



#### **Enable Admin Log**

Check this box will save administration log information to the file specified in the Log Filename.

#### Log Filename

The log file must be given a name so that information can be saved to a file. Your administration log file will be put in the Log\Admin directory. The log filename supports certain wildcard characters as outlined below:

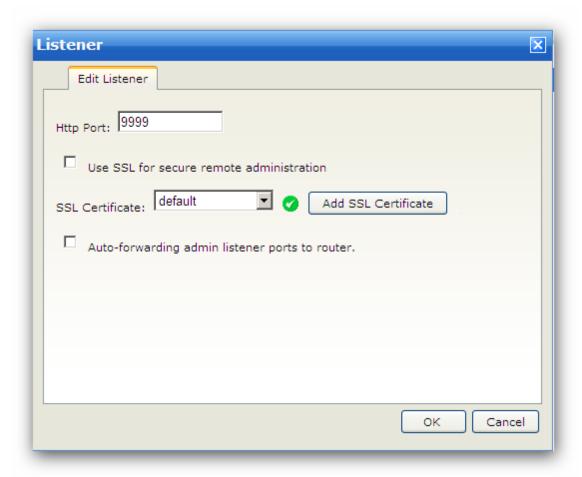
- %D The current day of the month
- %M The name of the current month
- %Y The 4-digit value of the current year (e.g., 2009)

#### Log Maxsize

The log file will no longer be written in when it reaches the limit you set here.

#### 3.3.2 Listener

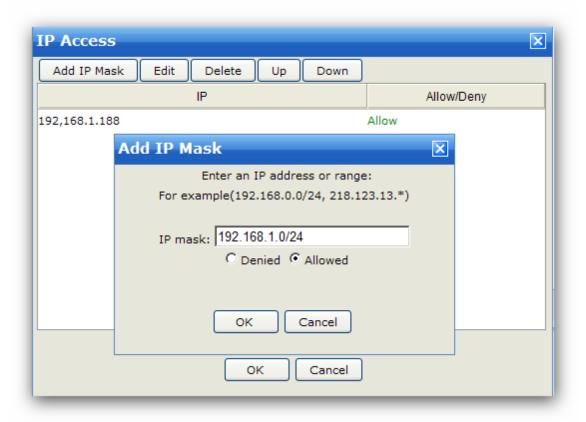
You can change the web admin's listener port here.



This window allows you to set up the IP port(default is 5466) that the administration server will listen to. If you want to use SSL for remote administration, please check the "Use SSL for secure remote administration" box and specify an SSL Certificate.

## 3.3.3 IP Access

Configure IP access rules to allow or deny access for all the administrators.



You can define IP access rules to allow/deny users' access based on IP address for all the administrators.

If you do not specify an IP address, the administrators can logon the server with any IP address. But if you set an allow list, the administrators can only obtain access by IP addresses specified in the list. If you set a deny list, the administrators can have access to the server by any IP address except those specified in the deny list. *The order of the rules is also very important.* 

#### For example:

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Refuse this administrator's connection from any IP except 192.168.1.188.

#### Deny \*

#### Allow 192.168.1.188

Refuse this administrator's connection from any IP, since 192.168.1.188 after \* impacts nothing.

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Remember whatever IP rules you added, administrators can always logon from the local IP address 127.0.0.1

So if you want to disable remote control from this administrator, just add rules like this:

#### Deny \*

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Also, the order of the rules may be altered using the Up and Down buttons on the right of the rule list.

#### Supported wildcards

IP address ranges and wildcards are supported by Wing FTP Server, as below:

XXX.XXX.XXX

IP address must be exactly matched(e.g. 192.168.1.1).

xxx.xxx.xxx.yyy

A specified range of IP addresses, e.g. 192.168.1.10-25.

xxx.xxx.xxx.xxx-yyy.yyy.yyy

A specified range of IP addresses, e.g. 192.168.1.0-192.168.5.255.

\*.\*.\* or xxx.\*.\*.\* or xxx.xxx.\*.\* or xxx.xxx.xxx.\*

Any valid IP address value (For example, 192.168.\*.\* represents any IP between 192.168.0.0 and 192.168.255.255).

CIDR convention is also supported:

192.168.0.0/24 (represents any IP between 192.168.0.0 and 192.168.0.255)

# Part

# 4 Server

# 4.1 Logs & Status

## 4.1.1 Server Status

Here you can check the status of your entire server, number of total sessions, download/upload speeds, sent/received bytes, running time ...

Statistics	Value	
Server Running Time	02:11:59	
Sessions	0	
Highest Num. Sessions	1	
24 Hours Sessions	2	
Avg. Session Length	00:02:31	
Longest Session	00:10:05	
Total Sessions	2	
Download Speed	0 Bytes/s	
Avg. Session Download Speed	0 Bytes/s	
Total Download	0 Bytes	
Total Download Files	0 files	
Upload Speed	O Bytes/s	
Avg. Session Upload Speed	O Bytes/s	
Total Upload	0 Bytes	
Total Upload Files	0 files	

#### Sessions

The number of sessions currently connected to the server.

#### **Highest Num Sessions**

The highest number of concurrent sessions that has been recorded since being placed online.

# 24 Hrs Sessions

The number of sessions that have connected to the server in the past 24 hours.

# **Average Session Length**

The average length of time that a session has remain connected.

#### **Longest Session**

The longest recorded time of a session connection.

#### **Total Sessions**

The total number of sessions that have connected since being placed online.

#### **Download Speed**

Cumulative download bandwidth currently being used.

#### Avg. Download Speed

The average download bandwidth used since being placed online.

#### **Total Download Bytes**

The total amount of data downloaded since being placed online.

#### **Total Download Files**

The total number of files downloaded since being placed online.

#### **Upload Speed**

Cumulative upload bandwidth being currently being used.

#### Avg. Upload Speed

The average upload bandwidth used since being placed online.

#### **Total Upload Bytes**

The total amount of data uploaded since being placed online.

#### **Total Upload Files**

The total number of files uploaded since being placed online.

## 4.1.2 Server Log

Here you can check logged activity for entire server, server message, server error, scripts error, task scheduler error ...

#### Pause

Click this button to temporarily pause refreshing of the log. This is useful on busy systems so a certain section of the log can be highlighted and copied before it is scrolled out of view. Once finished, click this button again to resume automatic updating of the log.

#### Filter Log

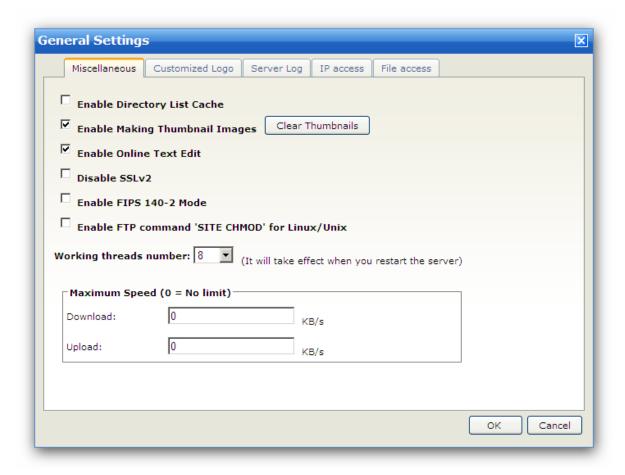
To quickly find and read through specific sections of the log, log filter is implemented based on search strings. Clicking this button brings up the Log Filter dialog. Providing a search string and clicking the Filter button refreshes the log to only display log entries containing the search string. To see the entire contents of the log again, open the Filter Log dialog and provide an empty search string.

# 4.2 Settings

# 4.2.1 General Settings

# 4.2.1.1 Miscellaneous

Server Miscellaneous Settings



# **Enable Directory List Cache**

This feature makes the server temporarily keep the directory list for a specified amount of time. And it will accelerate your file system speed.

#### **Enable Making Thumbnail Images**

This feature makes the server generate thumbnail images for web clients.

# **Clear Thumbnails**

Click this button to delete all the thumbnail images generated by the server.

#### **Enable Online Text Edit**

This feature makes text files editable online when using web client.

#### Disable SSLv2

When check on this option, only SSLv3 connections will be accepted.

#### **Enable FIPS 140-2 Mode**

When this option is checked during SSL certificate generation, only some cryptographic modules accredited by The Federal Information Processing Standard (FIPS) can be used.

#### **Enable FTP command 'SITE CHMOD' for Linux/Unix**

When this is enabled, the FTP client can use the command "SITE CHMOD permissions filename" to change the permissions of a file/folder. Note: only available on Unix-like operating systems.

#### Working threads number

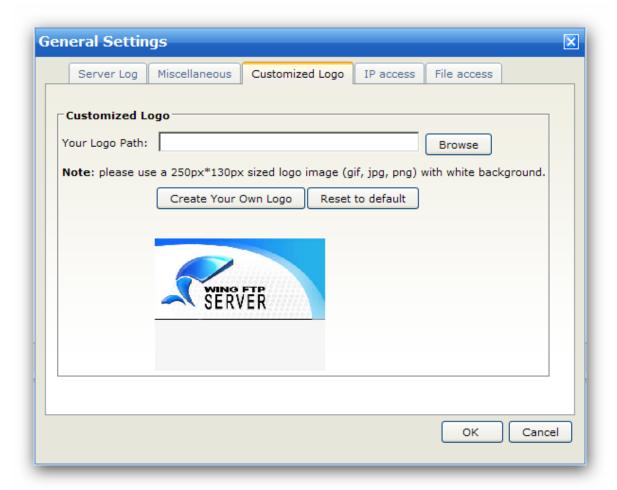
The number of threads the server will create to handle client requests. If you want to get high performance, increase this number, but it will cost more CPU time. We suggest you set this value to your CPU number \* 2.

# Maximum Download/Upload Speed

Limits the maximum download/upload bandwidth for the entire server.

# 4.2.1.2 Customized Logo

Use a customized logo to be displayed on the login and Web Client pages.



#### **Your Logo Path**

Specify your company logo from a local image file.

#### **Create Your Own Logo**

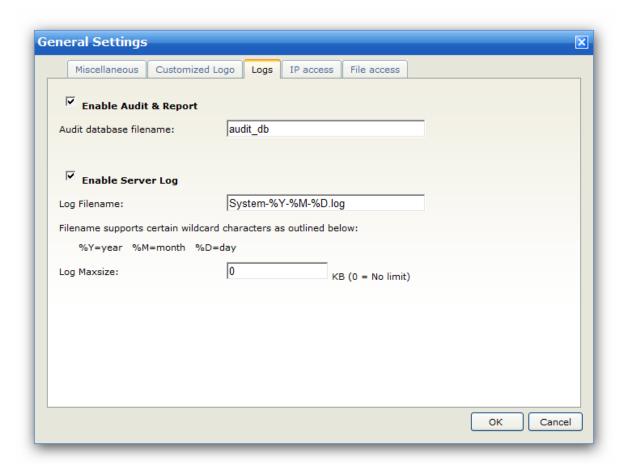
Create your own logo with the image file you specified.

# Reset to default

Reset your logo to the default "Wing FTP Server" logo image.

# 4.2.1.3 Logs

Here you can enable "Audit & Report" and "System Log".



#### **Enable Audit & Report**

When this option is checked on, Wing FTP Server will capture all the transactions into a database, then you can analyze it and generate reports in real time.

# Log Filename

The log file must be given a name before information can be saved to a file. Your system log file will be put in the directory "Log\System" by default. The log filename supports certain wildcard characters as outlined below.

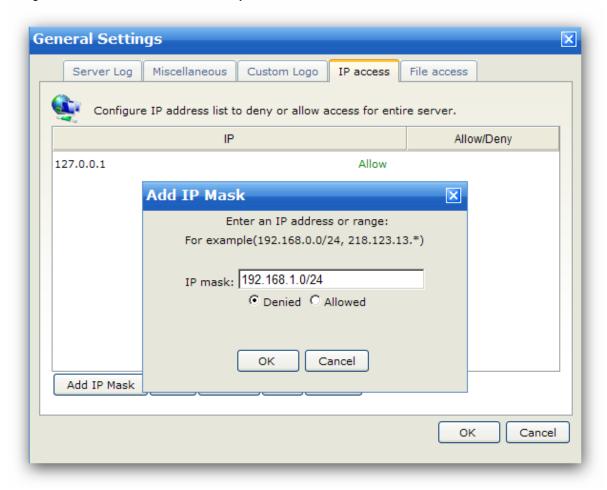
- %D The current day of the month
- %M The name of the current month
- %Y The 4-digit value of the current year, (e.g., 2009)

#### Log Maxsize

The log file will no longer be written in when it reaches the limit you set here.

#### 4.2.1.4 IP Access

Configure IP access rules to allow or deny access for the entire server.



You can define IP access rules to allow/deny users' access based on IP address for the entire server.

If you do not specify an IP address, the administrators can logon the server with any IP address. But if you set an allow list, the administrators can only obtain access by IP addresses specified in the list. If you set a deny list, the administrators can have access to the server by any IP address except those specified in the deny list.

For example:

#### Allow 127.0.0.1

Refuse all users' connection from any IP except 127.0.0.1.

# Deny \*

#### Allow 127.0.0.1

Refuse all users' connection from any IP, since 127.0.0.1 after \* impacts nothing.

# Rule list

The Rule list shows the current list and the order of IP rules. Rules can be added or removed from the list using the Add and Delete buttons.

Also, the order of the rules may be altered using the Up and Down buttons on the right of the rule list.

# Supported wildcards

IP address ranges and wildcards are supported by Wing FTP Server, as below:

XXX.XXX.XXX

IP address must be exactly matched(e.g. 192.168.1.1).

xxx.xxx.xxx.yyy

A specified range of IP addresses, e.g. 192.168.1.10-25.

xxx.xxx.xxx.xxx-yyy.yyy.yyy.yyy

A specified range of IP addresses, e.g. 192.168.1.0-192.168.5.255.

\*.\*.\* or xxx.\*.\*.\* or xxx.xxx.\*.\* or xxx.xxx.xxx.\*

Any valid IP address value (For example, 192.168.\*.\* represents any IP between 192.168.0.0 and 192.168.255.255).

CIDR convention is also supported:

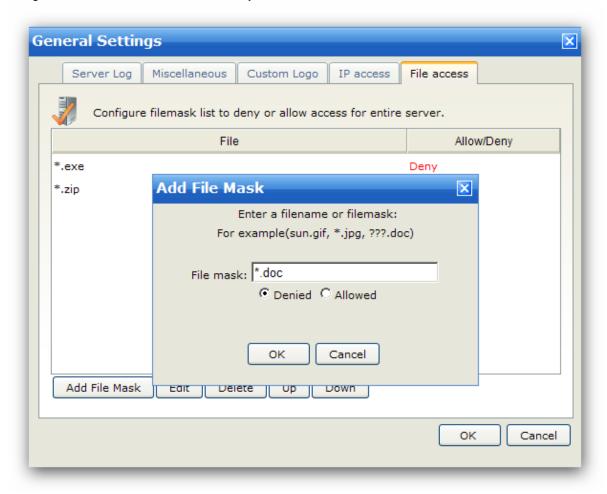
192.168.0.0/24 (represents any IP between 192.168.0.0 and 192.168.0.255)

#### **Priority**

The server's IP Access list has priority over domain's IP Access list.

#### 4.2.1.5 File Access

Configure File access rules to allow or deny access for the entire server.



Banned files are files that can't be accessed on the server. You can specify file/path mask (?, \* supported) : \*.jpg, c:\path\images\_200?\

Using this form, you can define allow/refuse access based on File name for the entire server.

If you do not specify any file/path, all users can access all the files on the server. But if you set an allow list, all users can only access the files in the list. If you set a deny list, all users can access all the other files except those in the deny list. The order of the rules is very important too.

For example

#### Allow \*.rar

Can not access/store any file except \*.rar.

# Deny \*

Allow \*.rar

Can not access/store any file, since \*.rar after \* impacts nothing.

#### Rule list

The rule list shows the current list and order of file access rules. Rules can be added and removed from the list using the Add and Delete buttons.

Also, the order of the rules may be altered using the Up and Down buttons on the right of the rule list.

# Supported wildcards

To define access rules you can use the wildcards? and \*.

#### **Priority**

The server's File Access list has priority over domain's File Access list.

# 4.2.2 SSL Certificate Manager

SSL Certificates are used for encrypting data exchanges between the user and the server. Without certificates you can not use SSL connections(FTPS and HTTPS).



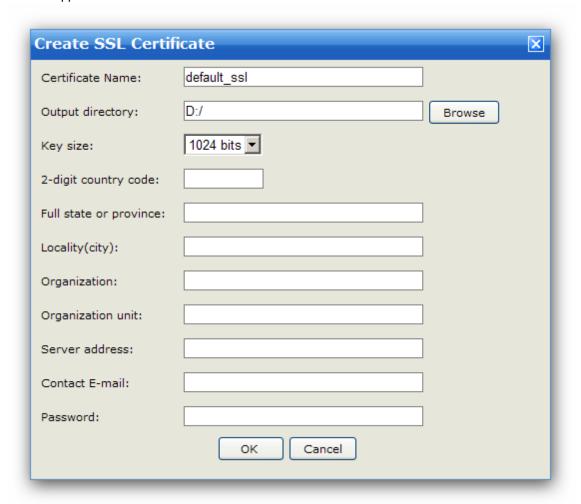
Click "Add SSL Certificate" button to add an SSL certificate. First you need to specify a name for this certificate.

It's simply an identifier to distinguish this SSL certificate from other SSL certificates.

Then you can choose a certificate file and a key file from your hard disk. If your key file requires password, you must enter it.

**Note:** If your certificate and private key are stored in one file (like PEM file), just specify the certificate path and private key path to the same file.

If you do not have any certificate file, click the "Create Certificate File" button, then a certificate creation form will appear.



# **Certificate Name**

The server will use this name to create certificate file, key file and certificate signing request(CSR) file. As shown in the above picture, they will be default\_ssl.crt, default\_ssl.key and default\_ssl.csr. CSR is a message sent to a certificate authority by an applicant in order to obtain a digital identity certificate.

Your CSR will contain encoded information specific to your company and domain name.

# **Output directory**

Output directory where the created files are to be placed.

#### Key Size

Key size for your private key file.

# Full state or province

Set this to the state or province where you are located.

#### Locality(City)

Set this to the city or town where you are located.

#### Organization

Set this to the name of your company or organization, like "Wing FTP Server Co., Ltd." .

#### Organization unit

This should be set to the organizational unit that owns the certificate, like "Software Department " or "IT".

#### Server address

The IP address or the domain name for the server. If the server address is not the IP address or domain name used by clients to connect, clients may be prompted that the certificate does not match the domain name they are connecting to.

#### **Contact E-mail**

Set this to the E-mail address you want the FTP clients to see.

# Country

This has to be the 2-letter abbreviation of the country where you are located (as defined in the ISO-3166 standard), like "US" for the United States.

# Valid country codes are:

Afghanistan AF

Albania AL

Algeria DZ

American Samoa AS

Andorra AD

Angola AO

Anguilla Al

Antarctica AQ

Antigua and Barbuda AG

Argentina AR

Armenia AM

Aruba AW

Australia AU

Austria AT

Azerbaijan AZ

Bahamas BS

Bahrain BH

Bangladesh BD

Barbados BB

Belarus BY

Belgium BE

Belize BZ

Benin BJ

Bermuda BM

Bhutan BT

Bolivia BO

Bosnia and Herzegovina BA

Botswana BW

Bouvet Island BV

Brazil BR

British Indian Ocean Territory IO

Brunei Darussalam BN

Bulgaria BG

Burkina Faso BF

Burundi BI

Cambodia KH

Cameroon CM

Canada CA

Cape Verde CV

Cayman Islands KY

Central African Republic CF

Chad TD

Chile CL

China CN

Christmas Island CX

Cocos (Keeling) Islands CC

Colombia CO

Comoros KM

Congo CG

Congo, The Democratic Republic Of The CD

Cook Islands CK

Costa Rica CR

Croatia HR

Cuba CU

Cyprus CY

Czech Republic CZ

Denmark DK

Djibouti DJ

Dominica DM

Dominican Republic DO

East Timor TP

Ecuador EC

Egypt EG

El Salvador SV

Equatorial Guinea GQ

Eritrea ER

Estonia EE

Ethiopia ET

Falkland Islands (Malvinas) FK

Faroe Islands FO

Fiji FJ

Finland FI

France FR

French Guiana GF

French Polynesia PF

French Southern Territories TF

Gabon GA

Gambia GM

Georgia GE

Germany DE

Ghana GH

Gibraltar GI

Greece GR

Greenland GL

Grenada GD

Guadeloupe GP

Guam GU

Guatemala GT

Guinea GN

Guinea-Bissau GW

Guyana GY

Haiti HT

Heard Island and Mcdonald Islands HM

Holy See (Vatican City State) VA

Honduras HN

Hong Kong HK

Hungary HU

Iceland IS

India IN

Indonesia ID

Iran, Islamic Republic Of IR

Iraq IQ

Ireland IE

Israel IL

Italy IT

Jamaica JM

Japan JP

Jordan JO

Kazakstan KZ

Kenya KE

Kiribati KI

Korea, Democratic People's Republic Of KP

Korea, Republic Of KR

Kuwait KW

Kyrgyzstan KG

Lao People's Democratic Republic LA

Latvia LV

Lebanon LB

Lesotho LS

Liberia LR

Libyan Arab Jamahiriya LY

Liechtenstein LI

Lithuania LT

Luxembourg LU

Macau MO

Macedonia, The Former Yugoslav Republic Of MK

Madagascar MG

Malawi MW

Malaysia MY

Maldives MV

Mali ML

Malta MT

Marshall Islands MH

Martinique MQ

Mauritania MR

Mauritius MU

Mayotte YT

Mexico MX

Micronesia, Federated States Of FM

Moldova, Republic Of MD

Monaco MC

Mongolia MN

Montserrat MS

Morocco MA

Mozambique MZ

Myanmar MM

Namibia NA

Nauru NR

Nepal NP

Netherlands NL

Netherlands Antilles AN

New Caledonia NC

New Zealand NZ

Nicaragua NI

Niger NE

Nigeria NG

Niue NU

Norfolk Island NF

Northern Mariana Islands MP

Norway NO

Oman OM

Pakistan PK

Palau PW

Palestinian Territory, occupied PS

Panama PA

Papua New Guinea PG

Paraguay PY

Peru PE

Philippines PH

Pitcairn PN

Poland PL

Portugal PT

Puerto Rico PR

Qatar QA

Romania RO

Russian Federation RU

Rwanda RW

Saint Helena SH

Saint Kitts and Nevis KN

Saint Lucia LC

Saint Pierre and Miquelon PM

Saint Vincent and The Grenadines VC

Samoa WS

San Marino SM

Sao Tome And Principe ST

Saudi Arabia SA

Senegal SN

Seychelles SC

Sierra Leone SL

Singapore SG

Slovakia SK

Slovenia SI

Solomon Islands SB

Somalia SO

South Africa ZA

South Georgia and The South Sandwich Islands GS

Spain ES

Sri Lanka LK

Sudan SD

Suriname SR

Svalbard and Jan Mayen SJ

Swaziland SZ

Sweden SE

Switzerland CH

Syrian Arab Republic SY

Taiwan, Province Of China TW

Tajikistan TJ

Tanzania, United Republic Of TZ

Thailand TH

Togo TG

Tokelau TK

Tonga TO

Trinidad and Tobago TT

Tunisia TN

Turkey TR

Turkmenistan TM

Turks and Caicos Islands TC

Tuvalu TV

Uganda UG

Ukraine UA

United Arab Emirates AE

United Kingdom GB

United States US

United States, minor outlying islands UM

Uruguay UY

Uzbekistan UZ

Vanuatu VU

Vatican City State, see Holy See

Venezuela VE

Viet Nam VN

Virgin Islands, British VG

Virgin Islands, U.S. VI

Wallis and Futuna WF

Western Sahara EH Yemen YE Yugoslavia YU Zaire, see Congo, The Democratic Republic Of The Zambia ZM Zimbabwe ZW

# 4.2.3 SSH Key Manager

SSH key is used for SFTP's(FTP over SSH) connections.



Click "Add SSH Key" button to add an SSH key. First you need to specify a name for this key. It's simply an identifier for you to distinguish the SSH key from other SSH keys.

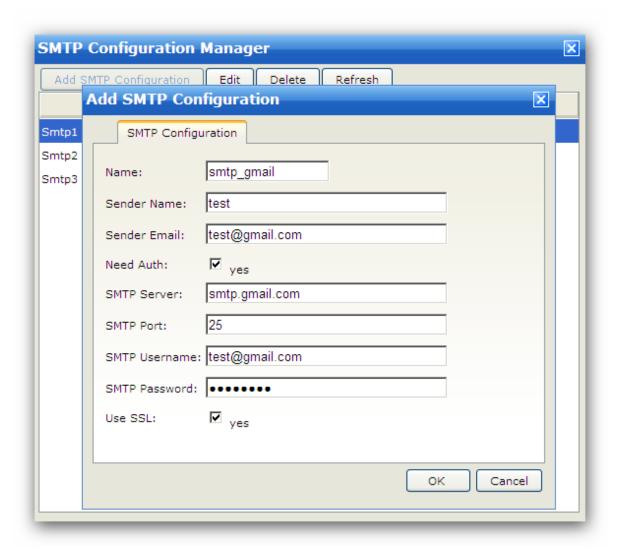
Then you can choose a key file from your hard disk.

If you do not have any key file, then just click the "Create Key File" button, an SSH key creation form will appear.



# 4.2.4 SMTP Server Manager

SMTP Server is used to send emails. You can configure it here.



Click the "Add SMTP Config" button to add an SMTP server.

#### Name

The identifier for you to distinguish this SMTP server from other SMTP server.

#### Sender Name:

FTP Server will use this as sender's name.

#### Sender Email:

FTP Server will use this as sender's email address.

#### **Need Auth:**

To prevent spam mails or other improper behaviors, some ISP will request authentication. If your SMTP server needs authentication, tick this option and input the username and password.

# **SMTP Server:**

Your outgoing mails will be sent from this mail server. The format shall be a domain name (e.g. smtp.

mail.com) or an IP number (e.g. 231.56.789.24).

#### **SMTP Port:**

The port the SMTP server is using.

# SMTP Username:

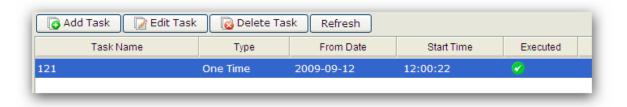
The account name is associated with authentication for the SMTP server.

# Use SSL:

SMTP server requires SSL connection.

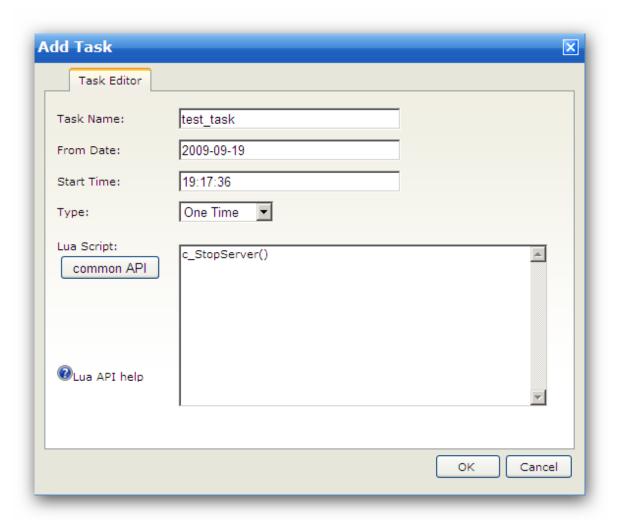
# 4.3 Task Scheduler

Task Scheduler is used to take an action(routine) at a specified time.



Click the button "Add Task", then you can define a task by Lua scripting. For example, you can let the server start or stop at a specified time by adding a task scheduler.

#### Add Task



Task Name: The identifier for this task
From Date: The task will start after this date
Start Time: The task will start after this time

Type: One Time/Once Hour/Once Day/Once Week/Once Month

Lua Script: Script you want to run

# Part

# 5 Domain

# 5.1 Logs & Status

# 5.1.1 Domain Status

Here you can check the current status of your domain, number of total sessions, download/upload speed, sent/received bytes, total running time ...

Statistics	Value	
Domain Running Time	02:10:01	,
Sessions	0	
Highest Num. Sessions	1	
24 Hours Sessions	2	
Avg. Session Length	00:05:03	
Longest Session	00:10:05	
Total Sessions	2	
Download Speed	O Bytes/s	
Avg. Session Download Speed	0 Bytes/s	
Total Download	0 Bytes	
Total Download Files	0 files	
Upload Speed	O Bytes/s	
Avg. Session Upload Speed	O Bytes/s	
Total Upload	0 Bytes	
Total Upload Files	0 files	

#### Sessions

The number of sessions currently connected.

# **Highest Num Sessions**

The highest number of concurrent sessions that have been recorded since being placed online.

# 24 Hrs Sessions

The number of sessions that have connected in the past 24 hours.

# **Average Session Length**

The average length of time a session has remained connected.

# **Longest Session**

The longest recorded time for a session.

#### **Total Sessions**

The total number of sessions that have connected since being placed online.

#### **Download Speed**

Cumulative download bandwidth currently used.

# Avg. Session Download Speed

The average session download bandwidth used since being placed online.

# **Total Download Bytes**

The total amount of data downloaded since being placed online.

#### **Total Download Files**

The total number of files downloaded since being placed online.

#### **Upload Speed**

Cumulative upload bandwidth currently used.

#### Avg. Session Upload Speed

The average session upload bandwidth used since being placed online.

#### **Total Upload Bytes**

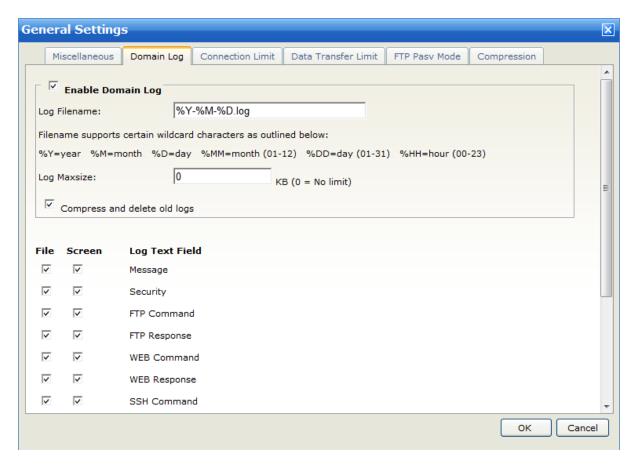
The total amount of data uploaded since being placed online.

# **Total Upload Files**

The total number of files uploaded since being placed online.

# 5.1.2 Domain Log

Here you can check logged activities for the domain, the commands from users, replies from the server, security tips, database errors, mail errors, and file errors ...



#### **Pause**

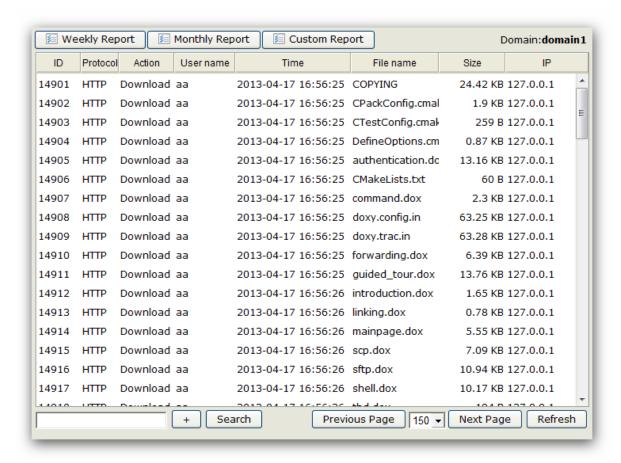
Click this button to temporarily pause the refreshing of the log. This is useful on busy systems so a certain section of the log can be highlighted and copied before it is scrolled out of view. Once finished, click this button again to resume automatic updating of the log.

# Filter Log

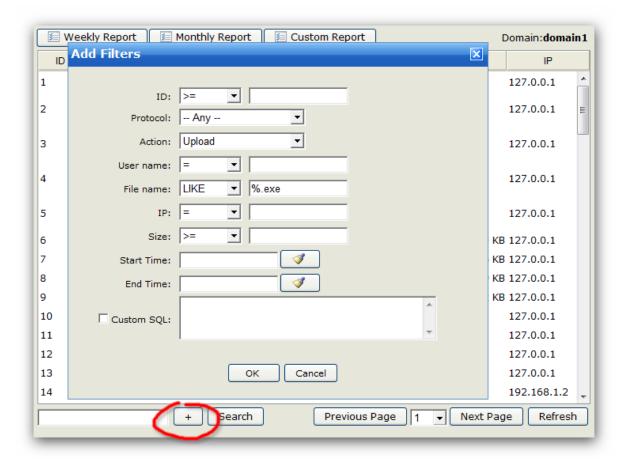
To quickly find and read through specific sections of the log, it can be filtered based upon a search string. Clicking this button brings up the Filter Log dialog. Providing a search string and clicking the Filter button refreshes the log to only display log entries containing the search string. To view the entire contents of the log again, open the Filter Log dialog and provide an empty search string.

# 5.1.3 Audit & Report

If you enable the option "Audit & Report" in the system settings, Wing FTP Server will capture all the transactions into a database, then you can analyze it and generate reports in real time.

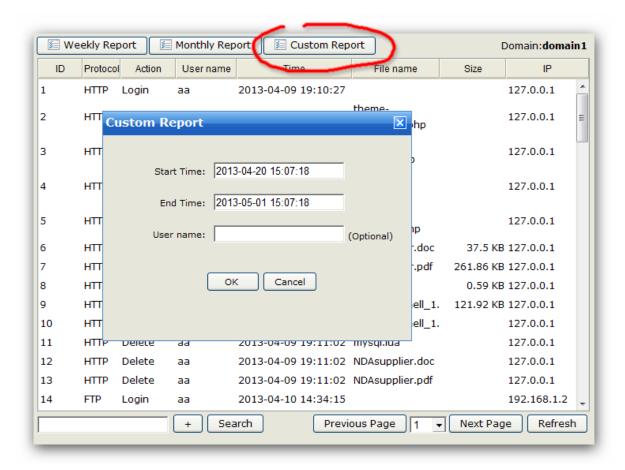


In the above interface, you can view all the transactions page by page, you can also add filters to display the data that meet the filtering criteria (just need to click the button "+" ).

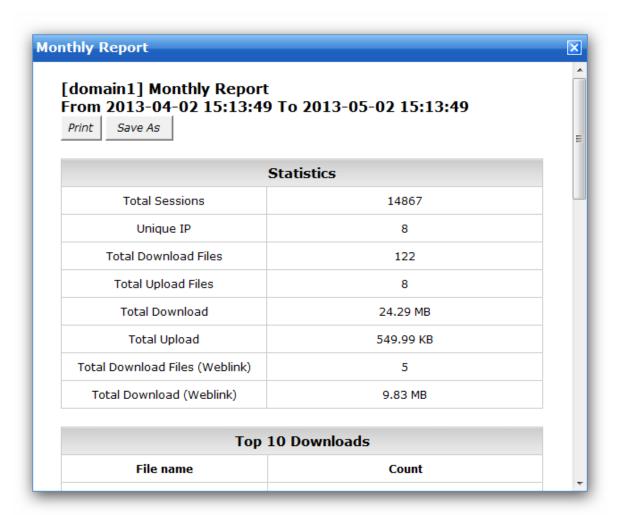


For a "LIKE" filter, you can use the wildcards "%" and "\_", "%" matches zero or more characters and "\_" matches a single character.

You can generate "Weekly Report", "Monthly Report" and "Custom Report", for the "Custom Report", you can specify the start time, end time or the username.

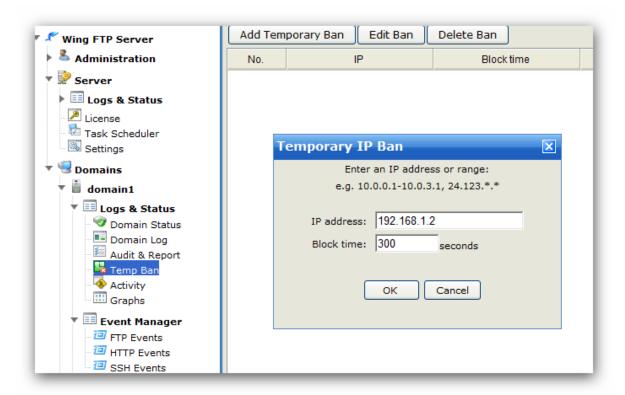


Finally, you will get a statistical report with general statistics and Top Files/IPs/Users, you can print it out or save it as a html file.



# 5.1.4 Temp Ban

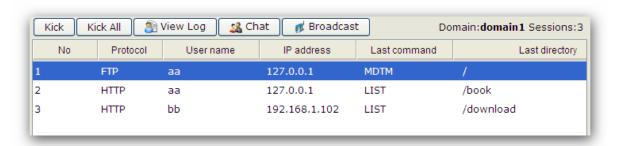
You can add, edit or delete a Temporary Ban rule in the below interface.



# 5.1.5 Activity

This page displays all online sessions' activities. From here, an overall picture of the current activity on the domain can be seen. In addition, individual sessions can be viewed including their current status, connection state, and transfer information.

To view the detailed information on a specific session, just double click the session. Depending upon the type of connection made by that session(e.g., FTP, HTTP, or SFTP), certain additional functions are available.



#### **Kick**

Any type of session can be kicked at any time by clicking the "Kick" button. Clicking the button brings up another dialog with additional options for how the disconnect should be performed. There are 3 types of disconnect options available:

Disconnect - Immediately disconnects the session. Another session can be immediately established by the disconnected client. This is also known as "kicking" the user.

Disconnect and ban IP - Immediately disconnects the session and bans their IP address for the specified number of minutes, preventing them from immediately reconnecting. Disconnect and block IP permanently - Immediately disconnects the session and adds a deny IP access rule for their IP address, preventing them from ever reconnecting from the same IP address.

In addition to disconnecting the session, the user account in use by the session can also be disabled by checking the box labeled Disable user account.

If the current session is using the FTP protocol, a message can be sent to the user before disconnecting them by typing it in the box labeled "Message to user. This option is not available for HTTP or SFTP sessions as neither protocol defines a method for chatting with users.

#### Kick All

Immediately disconnects all sessions. But another session can be immediately established by the disconnected client.

#### View Log

View the detailed information on a selected session.

#### Chat

The chat form shows all messages sent to and received from the session since beginning to "chat" on the session. To send a message to the session, enter the message text in the box labeled Message Content and click the Send button. When a message is received from the session, it is automatically displayed here.

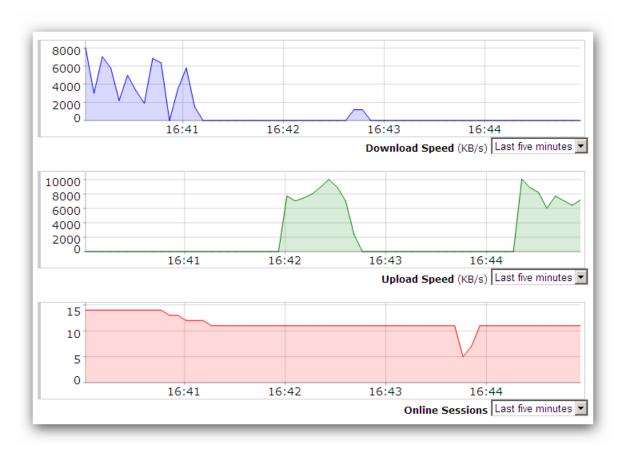
NOTE: Only FTP sessions support chatting with system administrators. The command used to send a message to the server is SITE MSG.

#### **Broadcast**

Send messages to all FTP sessions.

# **5.1.6 Graphs**

This graphs chart can report traffics of the last 5 minutes, 5 hours or 10 days for your domain.

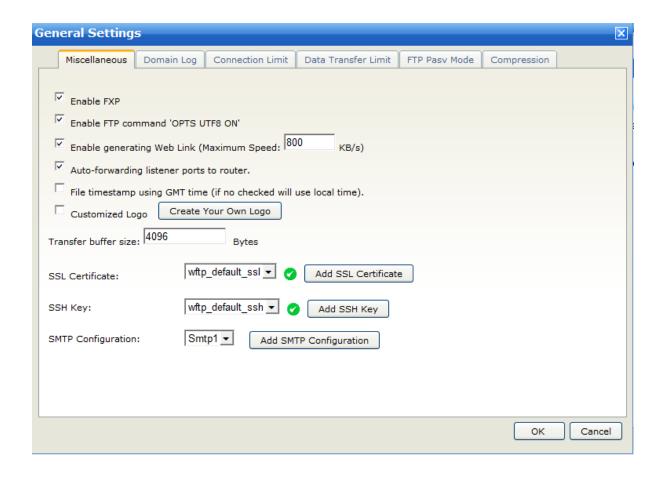


# 5.2 Domain Settings

# 5.2.1 General Settings

# 5.2.1.1 Miscellaneous

Domain Miscellaneous Settings.



#### **Enable FXP**

Activate, deactivate file transfer from server to server.

# **Enable FTP command 'OPTS UTF8 ON'**

Default is enabled. You can disable it to improve unicode compatibility when doing FTP using windows explorer.

#### **Enable generating Web Link**

When enabled, then user could generate Web Link for file sharing. You can also set the maximum download speed for Web Link downloading.

# Auto-forwarding listener ports to router

When enabled, the server automatically configures listener ports forward in your UPnP-enabled network device (usually a router) so that the server is accessible from outside your network. This option only forwards your listener ports. There is an option for passive ports forwarding in "FTP Pasv Mode" page.

# File timestamp using GMT time

When enabled, file listing uses GMT timestamp. If not checked, the local time will be used instead.

#### **Customized Logo**

You can specify a customized logo to be displayed on the login and Web Client pages, only for this domain.

#### Transfer buffer size

Transfer buffer size used to transfer data (default is 16 KB). You can increase this value if you want the server to read/write less often from/to the hard drive when clients transfer.

#### **SSL Certificate**

Select an SSL Certificate for this domain. You can manage your SSL Certificate in "Server->Settings->SSL Certificate Manager" page. SSL Certificates are used for encrypting data exchanges between the client and the server. Without certificates you can not use SSL connections (FTPS and HTTPS)

#### SSH Key

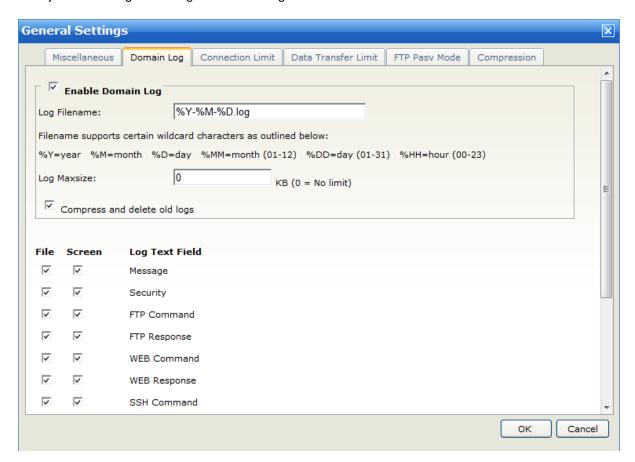
Select an SSH Key for this domain. You can manage your SSH Key in "Server->Settings->SSH Key Manager" page. SSH key is used for SSH FTP connections

#### **SMTP Configuration**

Select an SMTP Server for this domain. You can manage your SMTP Server in "Server->Settings->SMTP Manager" page. SMTP Server is used for sending emails.

# **5.2.1.2** Domain Log

Here you can configure settings for domain log.



#### Log Filename

The log file must be given a name before information can be saved to a file. Your domain log file will be put in the "Log\Domain Name" directory. The log filename supports certain wildcard characters as outlined below.

%Y - Current year %M - Current month, 1-12 %D - Current day, 1-31 %MM - Current month, 01-12 %DD - Current day, 01-31

%HH - Current hour, 00-23

#### Log Maxsize

The log file will be ignored if it reaches the limit you defined.

#### Compress and delete old logs

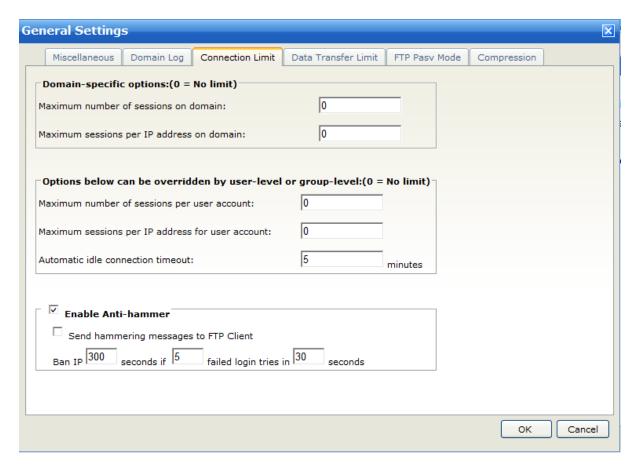
The log of the previous day will be automatically compressed and saved. After that, the original text format log file will be deleted in order to save disk space.

#### File& Screen Logging Options

For each type of information that can be logged, there are two options. The first check box indicates that this particular information should be logged to the message area of the domain log page. The second check box indicates that the particular information should be logged to a file. Check the option for screen or file logging for any information that is of interest to you. Please be aware of performance impacts, and the size of log files, when selecting this information.

#### 5.2.1.3 Connection Limit

You can limit the number of sessions on the domain here.



#### **Max Session**

Limit the number of sessions logged on this domain simultaneously.

#### Max Session Per IP

Limit the number of sessions from the same IP.

#### **Anti-hammer Enable**

Activate, deactivate anti- hammering.

#### Send hammering message to ftp client

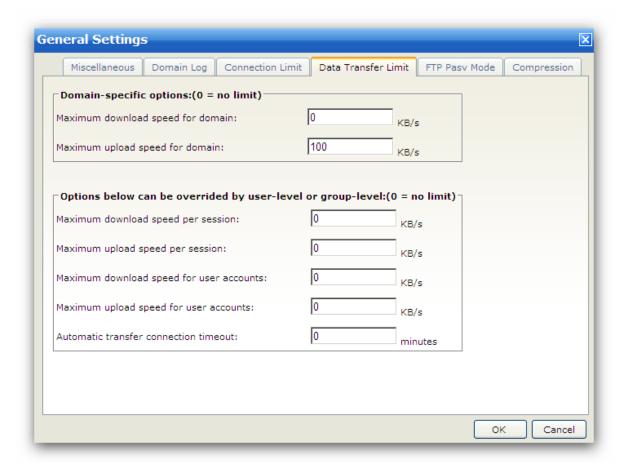
If a client tries to hammer this server, the server will send a message to him/her.

# Ban IP xx seconds if xx failed login tries in xx seconds

The counter will monitor the login tries and count them, if the number of failed login tries during the period is exceeded, the user IP will be banned for a period of time as defined.

# 5.2.1.4 Speed Limit

Here you can set the traffic limitation for this domain.



# Max Domain Download Speed

Max download speed for this domain.

# Max Domain Upload Speed

Max upload speed for this domain.

#### Max Session Download Speed

Max download speed for one session.

#### Max Session Upload Speed

Max upload speed for one session.

# Max User Download Speed

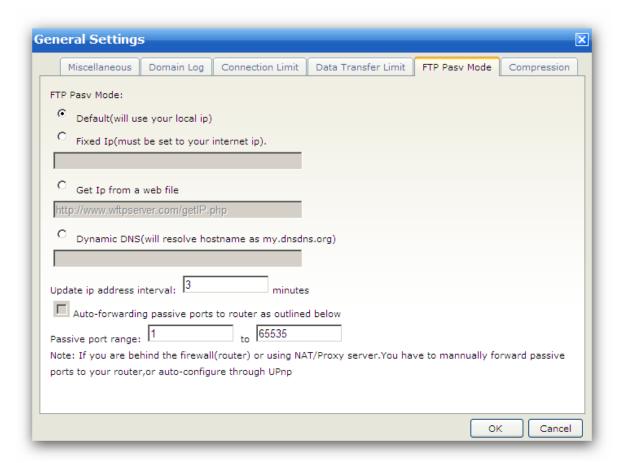
Max download speed for one user.

#### Max User Upload Speed

Max upload speed for one user.

#### 5.2.1.5 FTP Pasy Mode

Configure settings for FTP Pasv Mode.



# **Default**

Use your local IP.

#### **Fixed IP**

If you are assigned a fixed IP by your ISP, enter it in the box.

# Get IP from a web file

Get your internet IP from a web file, like: http://ip.wftpserver.com/w/getIP.php

# **Dynamic DNS**

If you are assigned a dynamic IP and are using a service like dyndns.org (or other) to keep your domain name pointing to your IP, enter the host name in the edit box.

#### Update IP address interval

If you get your IP from web file or DNS, the server will update it at intervals.

# **Auto-forwarding**

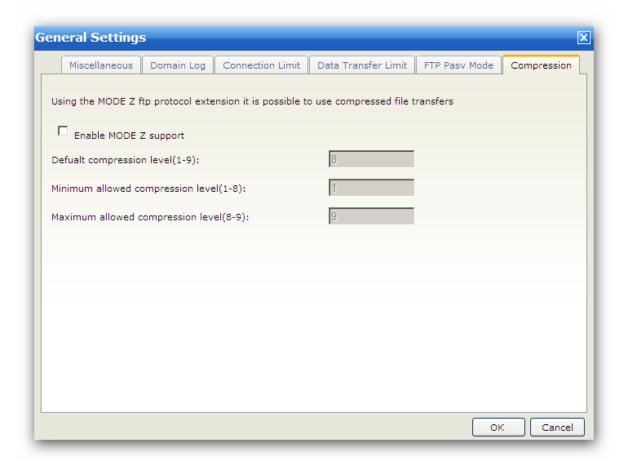
When enabled, the server automatically configures passive ports forward in your UPnP-enabled network device (usually a router) so that the server is accessible from outside your network.

# Passive port range

This is the range of ports that the server will use with passive mode(it is to simplify use of forwarding rule in router for example).

# 5.2.1.6 Compression

Compression can speedup the transfer between server and client.



# **Enable MODE Z support**

Activate, deactivate transfer compression.

# Default compression level

If FTP Client do not specify the the compression level, the server will use this value as default.

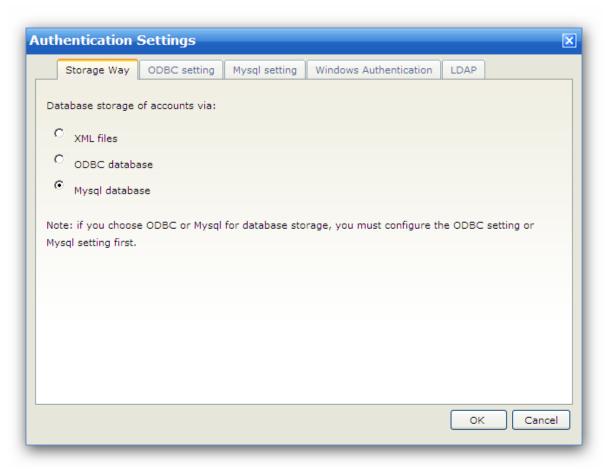
# Maximum and Minimum allowed compression level

The server only allows compression level between the minimum value and maximum value.

# 5.2.2 Authentication Settings

Wing FTP Server supports the several database types for authenticating users: XML files, ODBC database, Mysql database, Windows Authentication(NTLM or Active Directory) and LDAP.

# **Storage Way**

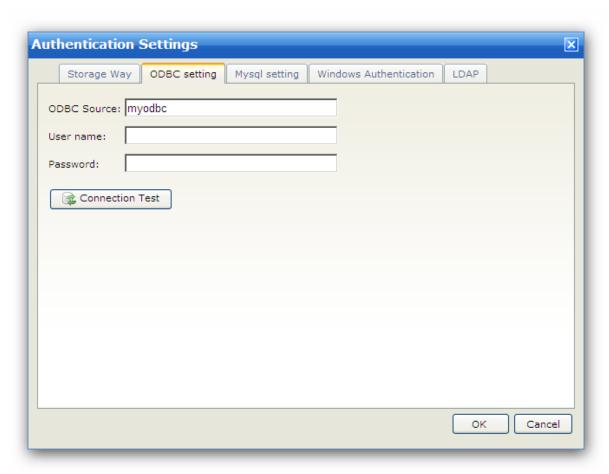


XML: Store your user/group data in xml files.

ODBC: Store your user/group data in ODBC database. Mysql: Store your user/group data in Mysql database.

**Note:** The server will automatically create all of the database schemas for the first time. If you use Mysql, please create a mysql database first, the default database name is "wftp\_database".

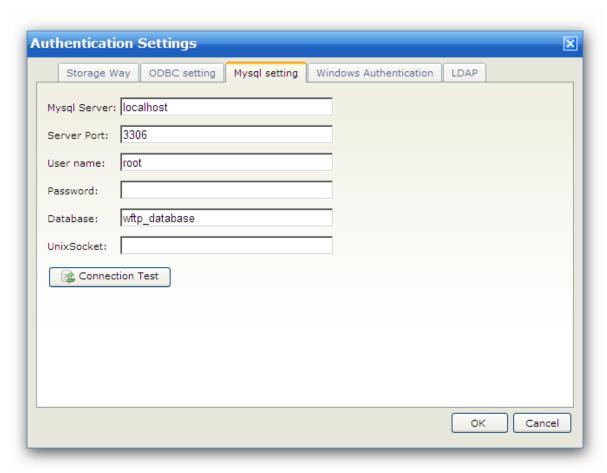
# **ODBC** setting



It is very easy to create an ODBC source, just enter the Data Source Name (DSN), Username, and Password.

When everything is ok, user/group data can be stored via most of all popular database softwares which have an ODBC driver.

# **Mysql setting**

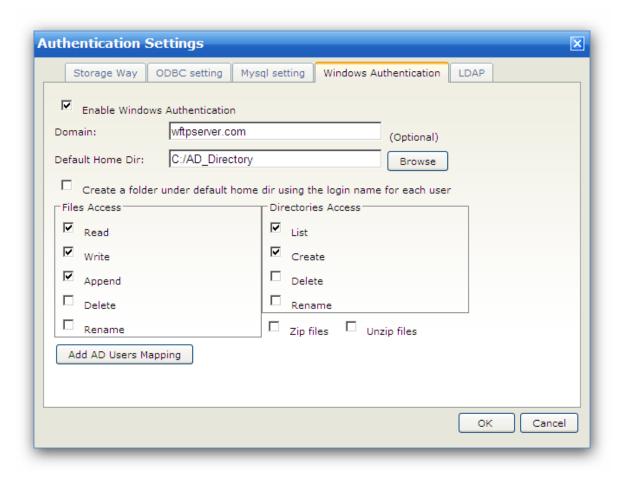


If your database system is Mysql, we suggest you use "Mysql" instead of "ODBC", because it can connect to Mysql database directly through C API, thus faster than "ODBC".

You need to create a mysql database "wftp\_database" for the first time.

You need to fill the field "UnixSocket" if you are using Linux/Unix system. Otherwise, just keep it empty.

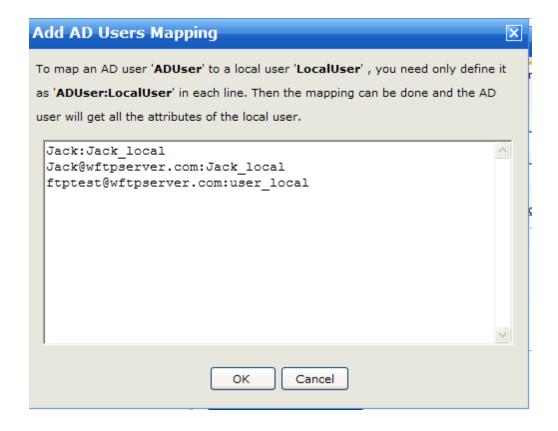
# **Windows Authentication**



Wing FTP Server can handle **Windows NTLM** or **Windows Active Directory** authentication automatically without the need to manually import users or sync user data.

If you enable "Windows Authentication", you can specify a global home directory for the AD account. And if you want each AD account to have its own home directory, please enable check box "Create a folder under global home using the login name for each user".

If you want to have more control to AD account like a local user of WingFTP, you can map the AD account to a local user. First create a local user at "Domains->Users->Add User", then click the button "Add AD Users Mapping" as shown in the above picture, input a new line in the format of "ADUserName: LocalUserName" (AD username and Local username are separated by colon). Make sure that one line only has one mapping item.



# NOTE:

# 1) Domain Name

A string that specifies the name of the domain or server whose account database contains the AD account. If this field is empty, the user name must be specified in <u>user principal name(UPN)</u> format, user@DNS\_domain\_name. Otherwise, you can login just with user.

2) Map the AD account to local

For example:

AD user name: Jack@domain.com password: ad\_password

Local user name: Jack\_Local password: local\_password

After the mapping, you can login the server with Jack@domain.com/ad\_password or Jack\_Local/ local\_password. If you login with Jack@domain.com/ad\_password, the Jack@domain.com will have all the functions belong to the Jack\_Local like virtual directories, group memberships, permissions and other settings.

WingFTP user authenticate sequence:

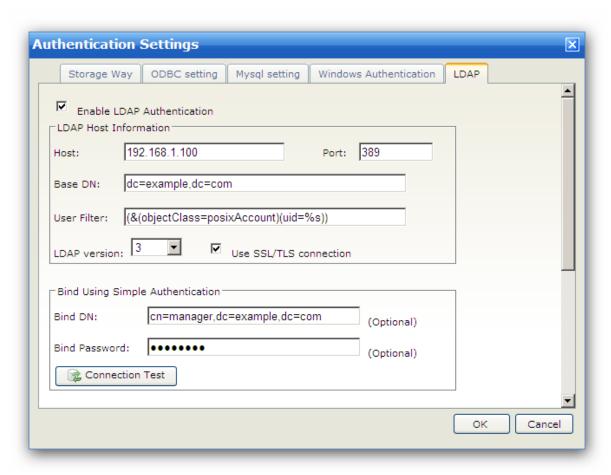
- 1) User "BOB" login with password "BOB2010".
- 2) Check the local user account to see if there is a account called "BOB".
- 2-1) if it exists, further check the local password. If password is correct, your login is successful. Otherwise, login has failed.
  - 2-2) if the account does not exist, do AD authentication.
    - 2-2-1) After completing the AD authentication, check if BOB has been mapped to a local user.

2-2-1-1) If "BOB" is mapped to a local user named "Local\_BOB", then it will get all the attributes of "Local\_BOB".

2-2-1-2) If there is no mapping for "BOB", take the AD authentication "Default Home Dir" as its home directory.

2-2-2) If the AD authentication fails, the login fails too.

# **LDAP Authentication**



Wing FTP Server supports using a LDAP(or LDAPS) database for authenticating users, we have test it successfully with OpenLDAP and Microsoft's Active Directory.

When you enable the option "LDAP Authentication", you need to provide the following information:

**Host**: the IP address or domain name of the LDAP server.

**Port**: the port number of the LDAP server, the default value is 389 (if you use SSL connection, the port will be 636 normally)

**Base DN:** the base domain name of search starting point. The DN string would usually be "dc=xxxx,dc=com".

**User Filter:** the filter to find the object for authenticating users. The special characters '%s' in the

filter string will be replaced with the real username.

Wing FTP Server uses default filter "(&(objectClass=posixAccount)(uid=%s))" for OpenLDAP. Or if you use Microsoft's Active Directory, the filter string would ususly be "(&(objectClass=user) (sAMAccountName=%s))".

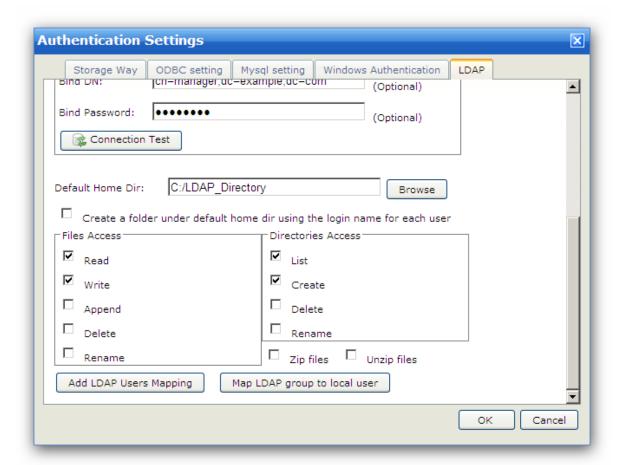
**LDAP version**: the version of LDAP server will be 3 in normal case. **Use SSL/TLS connection**: you can enable it if the LDAP server supports SSL/TLS connection.

**Bind DN:** the LDAP distinguished name string for simple authentication, e.g. "cn=manager, dc=example,dc=com".

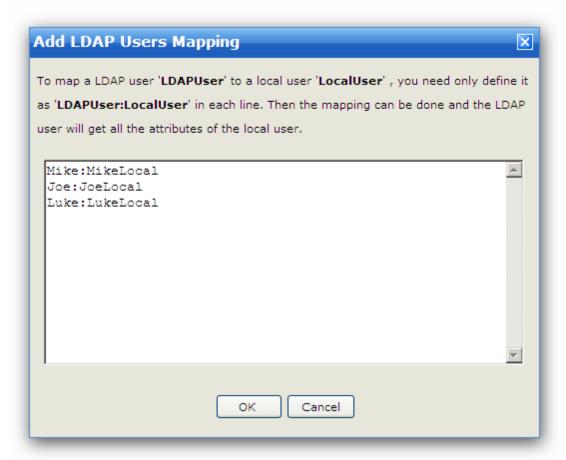
**Bind Password:** the password to bind the previous DN.

**Note1:** The LDAP database (except Windows Active Directory) must have an attribute 'userPassword' (RFC 3112), and the attribute 'userPassword' must be accessible. The following password format is supported: plain text, {crypt}, {md5}, {sha}, {smd5}, {ssha} **Note2:** The username in the LDAP database cannot contain some special characters: '%', '\*', '?', ',', '"'. For security purposes.

You need to specify a global home directory for the LDAP account. And if you want each LDAP account to have its own home directory, please enable check box "Create a folder under global home using the login name for each user":



If you want to have more control to LDAP account like a local user of WingFTP, you can map the LDAP account to a local user. First create a local user at "Domains->Users->Add User", then click the button "Add LDAP Users Mapping" as shown in the above picture, input a new line in the format of "LDAPUser: LocalUser" (LDAP username and Local username are separated by colon). Make sure that one line only has one mapping item.



Map the LDAP account to the local account

For example:

LDAP username: Jack

password: Idap password

Local username: Jack\_local password: local\_password

After the mapping, you can login the server with Jack/Idap\_password or Jack\_Local/local\_password. Then LDAP user "Jack" will have all the functions belong to the "Jack\_Local" like virtual directories, group memberships, permissions and other settings.

WingFTP user authenticate sequence:

- 1) User "JOE" login with password "JOE2010".
- 2) Check the local user account to see if there is a account called "JOE".
- 2-1) if it exists, further check the local password. If password is correct, your login is successful. Otherwise, login has failed.
  - 2-2) if the account does not exist, do LDAP authentication.
    - 2-2-1) After completing the LDAP authentication, check if "JOE" has been mapped to a local

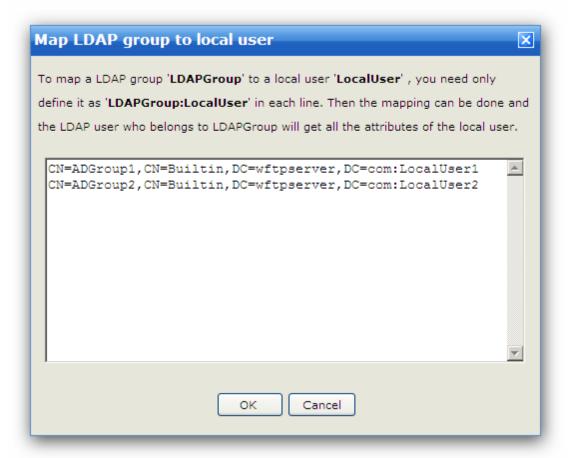
user.

2-2-1-1) If "JOE" is mapped to a local user named "Local\_JOE", then it will get all the attributes of "Local\_JOE".

2-2-1-2) If there is no mapping for "JOE", take the LDAP authentication "Default Home Dir" as its home directory.

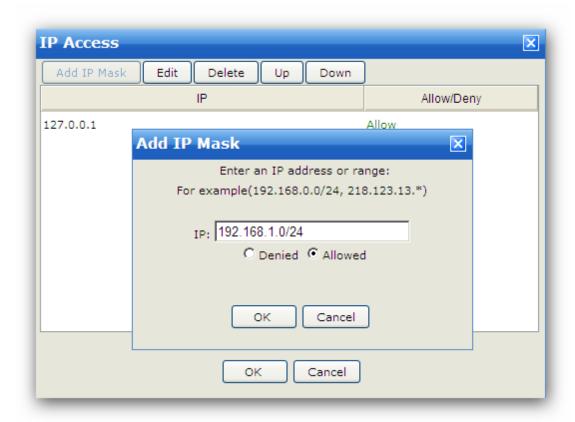
2-2-2) If the LDAP authentication fails, the login fails too.

You can also map LDAP group to local user by clicking the button "Map LDAP group to local user", input a new line in the format of "LDAPGroup:LocalUser" (LDAP group name and Local username are separated by colon).



# 5.2.3 IP Access

Configure IP access rules to allow or deny access for this domain



You can define IP access rules to allow/deny users' access based on IP address for this domain.

If you do not specify an IP address, all the domain users can logon the server with any IP address. But if you set an allow list, the domain users can only obtain access by IP addresses specified in the list. If you set a deny list, the domain users can have access to the server by any IP address except those specified in the deny list.

# For example:

### Allow 127.0.0.1

Refuse all the domain users' connection from any IP except 127.0.0.1.

# Deny \*

# Allow 127.0.0.1

Refuse all the domain users' connection from any IP, since 127.0.0.1 after \* impacts nothing.

# Rule list

The Rule list shows the current list and the order of IP rules. Rules can be added or removed from the list using the Add and Delete buttons.

Also, the order of the rules may be altered using the Up and Down buttons on the right of the rule list.

# Supported wildcards

IP address ranges and wildcards are supported by Wing FTP Server, as below:

XXX.XXX.XXX

IP address must be exactly matched(e.g. 192.168.1.1).

xxx.xxx.xxx.yyy

A specified range of IP addresses, e.g. 192.168.1.10-25.

xxx.xxx.xxx.xxx-yyy.yyy.yyy.yyy

A specified range of IP addresses, e.g. 192.168.1.0-192.168.5.255.

\*.\*.\*.\* or xxx.\*.\*.\* or xxx.xxx.\*.\* or xxx.xxx.xxx.\*

Any valid IP address value (For example, 192.168.\*.\* represents any IP between 192.168.0.0 and 192.168.255.255).

CIDR convention is also supported:

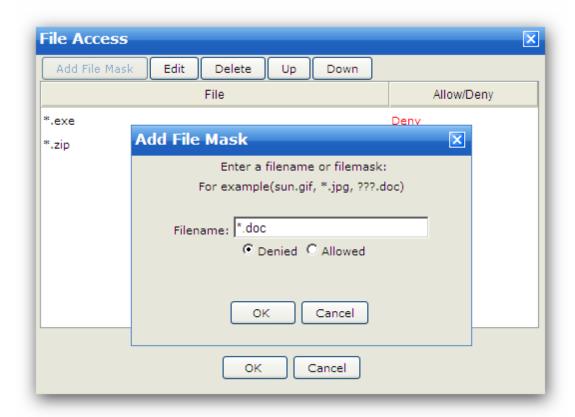
192.168.0.0/24 (represents any IP between 192.168.0.0 and 192.168.0.255)

# **Priority**

The domain's IP Access list has priority over user account's IP Access list.

# 5.2.4 File Access

Configure file access rules to allow or deny access to this domain.



Banned files are files that can't be accessed on server. You can specify file/path mask (?, \* supported) : \*.jpg, c:\path\images\_200?\

Using this form, you can define deny/allow access based on Filename for this domain.

If you do not specify any file/path, all users can access all the files on the server. But if you set an allow list, all users can only access the files allowed in the list. If you set a deny list, all users can access the files except those in the deny list. The order of the rules is very important too.

### For example

# Allow \*.rar

Can not access/store any file except \*.rar.

# Deny \*

Allow \*.rar

Can not access/store any file, since \*.rar after \* impacts nothing.

# Rule list

The rule list shows the current list and order of file access rules. Rules can be added and removed from the list using the Add and Delete buttons.

Also, the order of the rules may be altered using the Up and Down buttons on the right of the rule list.

# Supported wildcards

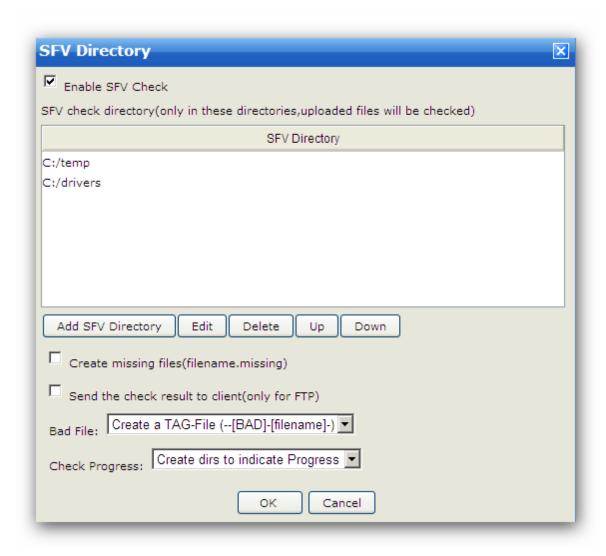
To define access rules, you can use the wildcards? and \*.

# **Priority**

The domain's File Access list has priority over user account's File Access list.

# 5.2.5 SFV Directory

Simple file verification (SFV) is a file format for storing CRC32 checksums of files in order to verify the integrity of files. SFV can be used to detect random corruptions in a file, but cannot be used for checking authenticity in any meaningful way. Typically, the .sfv extension is used on SFV files. SFV Check is used to check the files user uploaded. If you enable this option, when a client upload an SFV file, the server will start to check the files listed in the SFV file and send the result to client. Client can create SFV files by QuickSFV.



# Add SFV Directory

The server only checks SFV files in the SFV Directory. So if you want to enable SFV Check, you need to add SFV directory first.

### **Edit**

Edit the selected directory.

### Delete

Delete the selected directory.

### Create missing files(filename.missing)

If the files listed in the SFV file can not be found in the same directory with the SFV file, missing files (filename.missing) will be created.

# Send the check result to client(only for FTP)

FTP clients can receive the checker's response message.

### **Bad File**

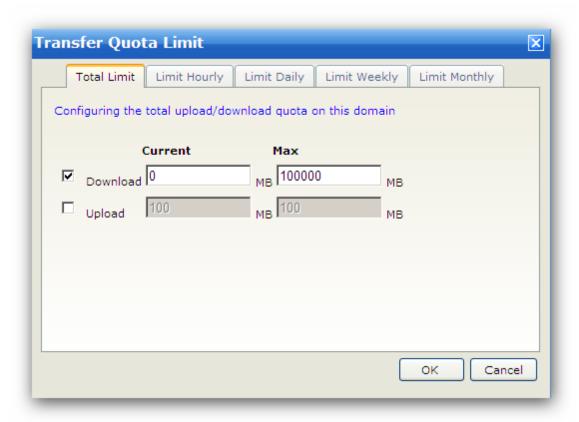
What to do when the server encounter a bad file. You can choose "Create a Tag File", "Rename the bad file" or "Delete the bad file".

# **Check Progress**

How to indicate the check progress. You can choose "Create dirs to indicate progress", "Create files to indicate progress" or "Do not indicate progress".

# 5.2.6 Transfer Quota Limit

Here you can configure the transfer quota limitation for this domain.



**Current:** actual MBytes transferred.

Max: maximum MBytes that can be transferred.

Total Limit: the limit will never be reset.

Limit Hourly: the limit will be reset every hour.

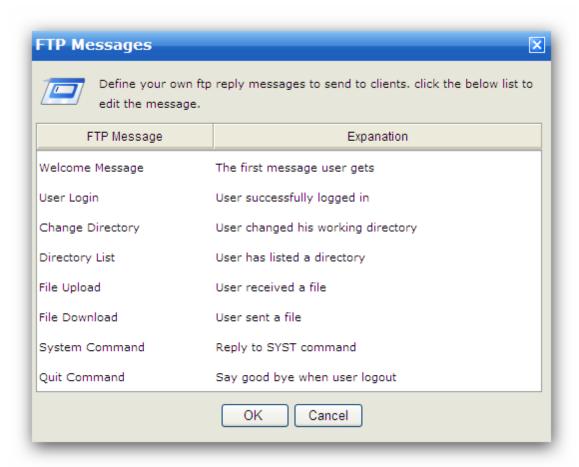
Limit Daily: the limit will be reset every day.

Limit Weekly: the limit will be reset every week.

Limit Monthly: the limit will be reset every month.

# 5.2.7 FTP Messages

You can define your own FTP reply messages here.



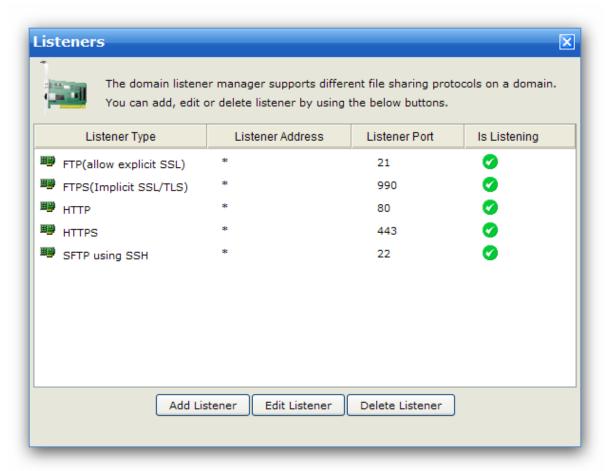
If you think that built-in messages are too cryptic for your users or want to translate them, you can define them by yourself.

This page will allow you to set new FTP messages. You can also use server variables here. For example, the default message for "Change Directory" is: CWD command successful. "%Dir" is current directory.

Here "%Dir" is a server variable. You can see a list of all the server variables at "Advance->Server Variables".

# 5.2.8 Listeners

The server offers a highly configurable interface for enabling the different file sharing protocols on a domain. Listeners can be added, edited, and deleted using the appropriately labeled button. Each domain can listen on multiple ports and IP addresses by adding a listener bound to the desired IP address and port. In addition to selecting these connection attributes for a listener, a file sharing protocol must also be selected.



# **Protocols Supported**

### FTP - File Transfer Protocol

FTP is the traditional protocol for transferring files over the Internet. It normally operates on the default port 21. Traditionally, FTP is handled in plain-text, however SSL connections are explicitly supported through the use of the AUTH command.

# FTPS - File Transfer Protocol using SSL

FTPS is identical to FTP, however connecting to a listener configured for FTPS means that an SSL connection is required before any protocol communication is performed. This is commonly referred to as Implicit FTPS, which normally takes place on the default port 990.

# SFTP - Secure File Transfer Using SSH2

SFTP is a secure method of transferring files through a secure shell session. It performs all protocol communications and data transfers over the same port eliminating the need to open multiple ports in firewalls as is commonly required when using FTP. SFTP sessions are always encrypted. SFTP operates on the default port 22.

# HTTP - Hypertext Transfer Protocol

HTTP is the protocol used to browse Web sites. It's also a simple method for downloading and transferring files. One benefit to adding an HTTP listener to a Domain is the availability of the Web Client, which allows users to transfer files to and from your File Server without the need for a stand-alone client. HTTP traditionally operates on port 80.

HTTPS - Hypertext Transfer Protocol using SSL

HTTPS is identical to HTTP except all communications are secured using SSL. Like FTPS, a secure connection is implied when connecting to a listener running the HTTPS protocol. The default port for HTTPS is 443.

# Adding a Listener

After clicking the Add Listener button, you will see the listener configuration dialog. After configuring each of the listener options, click the OK button to add the listener to the Domain.

# **Type**

Select the desired file sharing protocol that is to be supported by this listener. Each listener can only support a single protocol. To add more file sharing protocols to the Domain, create new listeners for each protocol. A brief description of the support file sharing protocols is found above.

### **IP Address**

You can select the IP address that you want to bind here. Leaving the field \* tells server to listen on all available IP addresses.

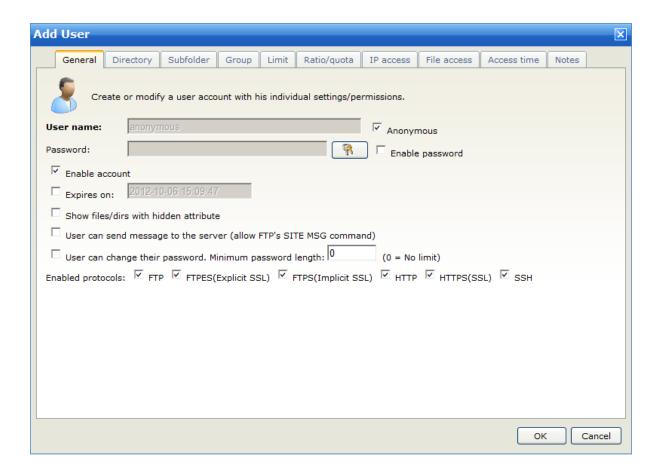
# 5.3 Users

# 5.3.1 User General

A user account is required in order to obtain access to the server. At its most basic level, a user account defines login credentials (i.e., user name and password), a home directory, and a set of Directory Access Rules that defines the areas of the system accessible to the User and the actions they can perform in those locations. Click "Quick Add" button to add a user with basic level information.



If you want to add a user with detailed information, please click the "Add User" button.



# User Name

NOTE: There is a special user name "Anonymous". Usually it is used by visiting guests on your server. For anonymous user, password is not required and the field should be left blank in this case.

### Password

The password is the second item required for a session to be authenticated with the server.

### **Enable account**

Uncheck this box to disable the current account. Disabled accounts remain on the server but cannot be used to login. To re-enable the account, check the Enable account box again.

### Expire or

This account would be automatically disabled at the specified time.

# Show files/dirs with hidden attribute

With this option, files and directories with hidden attribute will be shown in the file list.

### User can send message to the server

By executing FTP command "SITE MSG message", the user can send messages to server.

# User can change his password

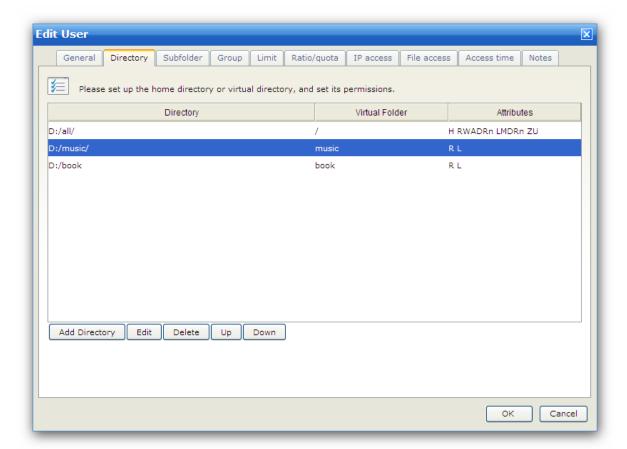
By executing FTP command "SITE PSWD oldpass newpass", the user can change his/her password. Web Client also provides this function.

# **Enabled protocols**

Select the protocols you want to enable for this user.

# 5.3.2 User Directory

Directory access rules define the areas of the system that can be accessed by this user account.



# **Add Directory**

Add a directory to this user. It can be a home directory or a virtual directory. If added as a virtual directory, the local physical directory will be shown to user as a virtual directory. For example, "D:\MP3" will be shown as subdirectory "mp3" and "E:\movies" will be shown as subdirectory "movies".

# Edit

Edit the selected directory.

### Delete

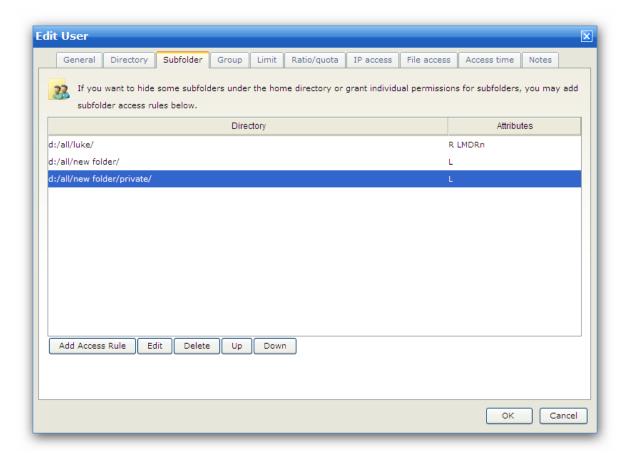
Delete the selected directory.

# Up/Down

Change the order of directory.

# 5.3.3 User Subfolder

If you want to hide some subfolders under the home directory or grant individual permissions for subfolders, you may add some subfolder access rules.



### Add Access Rule

Add an access rule for subfolder, then the subfolder will have individual permissions from home directory.

# **Edit**

Edit the selected directory.

### Delete

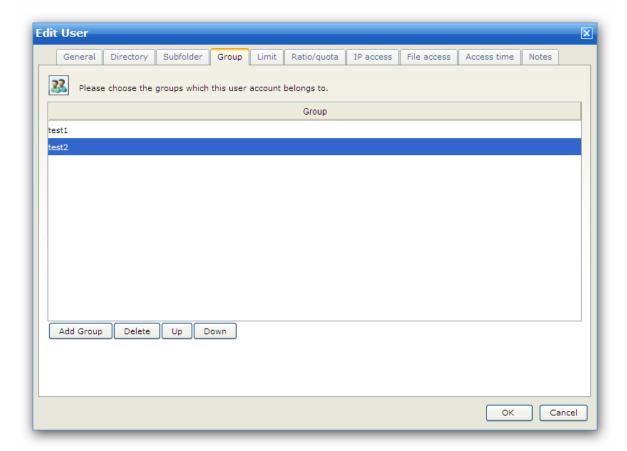
Delete the selected directory.

# Up/Down

Change the order of directory.

# 5.3.4 User Group

If you want several users to have the same access rights to your server, it is a good idea to set up a group account for all of them rather than having to define the same options in each account. This is a handy method to handle large numbers of users/user rights without too much of work. Permissions and attributes inherited by a user through group membership can be overridden at the user level. User can be a member of multiple groups in order to acquire multiple collections of permissions, such as File or IP access rules.



# **Add Group**

Assign user a group.

### **Delete**

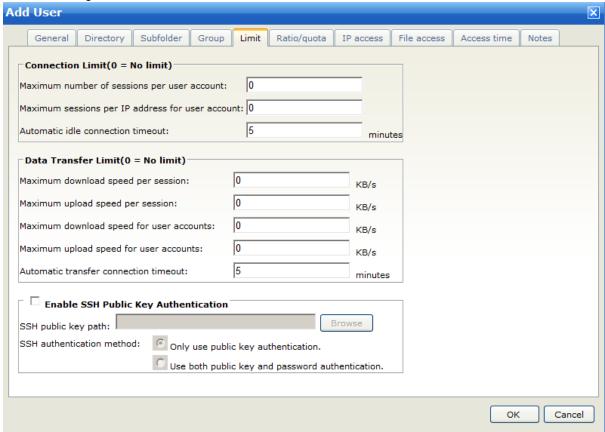
Remove the selected group.

# Up/Down

Change the order of selected groups. Because a user can be a member of multiple groups, the order in which group memberships are presented is important. The first group encountered by the server that provides a value for an attribute is the value that is used.

# 5.3.5 User Limit

You can configure user's Connection Limitation and Data Transfer Limitation here.



# Max number of sessions per user account

Specifies the maximum number of concurrent sessions that may be opened from a single user account.

### Max sessions per IP

Specifies the maximum number of concurrent sessions that a user may open from a single IP address.

# **Automatic idle connection timeout**

When a client has been idle(No FTP Command) for a specific time, it will be automatically disconnected.

# Max download speed per session

Limits the maximum download bandwidth for each individual session. Setting a limit of 0 KB/s means unlimited bandwidth.

# Max upload speed per session

Limits the maximum upload bandwidth for each individual session. Setting a limit of 0 KB/s means unlimited bandwidth.

# Max download speed for user accounts

Limits the maximum download bandwidth shared between all sessions associated with an individual user account. Setting a limit of 0 KB/s means unlimited bandwidth.

### Max upload speed for user accounts

Limits the maximum upload bandwidth shared between all sessions associated with an individual User account. Setting a limit of 0 KB/s means unlimited bandwidth.

# Automatic transfer connection timeout (only for FTP protocol)

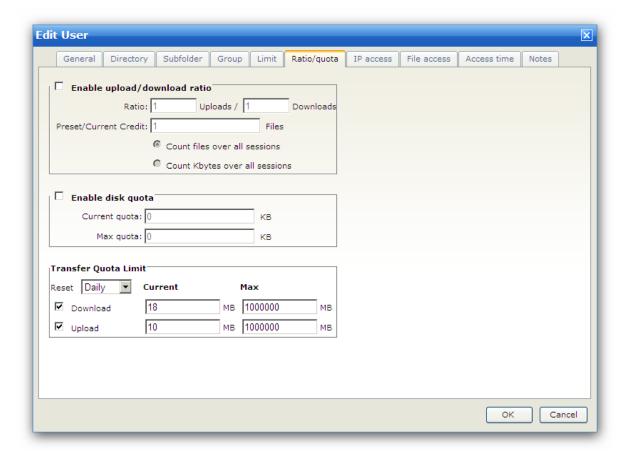
When a client has been idle(No Data Transfer) for a specific time, it will be automatically disconnected.

# **SSH Public Key Authentication**

WingFTP use the password as the SSH authentication. If you want more secure, you can choose use public key authenticate. There are some option to set as shown.

# 5.3.6 User Ratio & Quota

Ratios are implemented to encourage people to give while they receive. For example, if you want a user to get 1 byte of download for every byte they upload, the ratio is set to 1/1; 1 byte upload for 2 bytes to download makes a ratio of 1/2. If they upload a file of 100 bytes at a ratio set to 1/2, they will have 200 bytes for credit but only 50 bytes if the ratio is set to 2/1.



# Ratio uploads

New credit = current credit + (ratio download / Ratio upload )\* file size

### Ratio downloads

New credit = current credit - file size

# Count files over all sessions

The ratios apply to files uploaded or downloaded across sessions. The ratio will be calculated using the

number of files uploaded or downloaded. The Credit amount applies to all users of all sessions using this account and it is remembered by the server between sessions.

# Count bytes over all sessions

The ratios apply to files uploaded or downloaded across sessions. The ratio will be calculated using the number of bytes uploaded or downloaded. The Credit amount applies to all users of all sessions using this account and it is remembered by the server between sessions.

### Quota

This is feature allows you to set the maximum space each user can use on your server. A user cannot upload if he exceeds his quota. Then he needs to delete some files. If a user's quota is zero and he deletes a file, his quota remains at zero.

# Reset every (hour, day, week or month)

The limit will be reset every selected period. As a hosting company, you could allocate your user a maximum traffic per month using this option.

### **Transfer Limit Current**

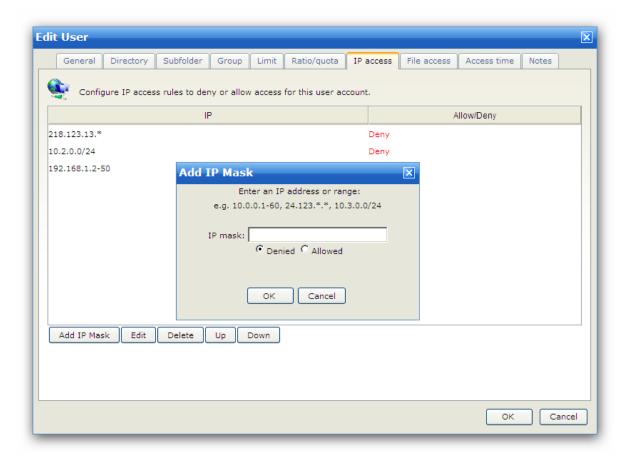
Actual MBytes transferred.

# **Transfer Limit Max**

Maximum MBytes that can be transferred.

# 5.3.7 User IP Access

Configure IP access rules to allow or deny access for this user.



You can define IP access rules to allow/deny users' access based on IP address for this user.

If you do not specify any IP address, this user can logon from any IP address. But if you set an allow list, the user can only access from the IP addresses allowed in the list. If you set a deny list, the user can obtain access by all IP addresses except those in the deny list.

# For example:

### Allow 127.0.0.1

Refuse user's connection from any IP except 127.0.0.1.

# Deny \*

### Allow 127.0.0.1

Refuse user's connection from any IP, since 127.0.0.1 after \* impacts nothing.

### Rule list

The Rule list shows the current list and the order of IP rules. Rules can be added or removed from the list using the Add and Delete buttons.

Also, the order of the rules may be altered using the Up and Down buttons on the right of the rule list.

# Supported wildcards

IP address ranges and wildcards are supported by Wing FTP Server, as below:

### XXX.XXX.XXX

IP address must be exactly matched(e.g. 192.168.1.1).

# xxx.xxx.xxx.xxy-yyy

A specified range of IP addresses, e.g. 192.168.1.10-25.

# xxx.xxx.xxx.xxx-yyy.yyy.yyy.yyy

A specified range of IP addresses, e.g. 192.168.1.0-192.168.5.255.

```
*.*.*.* or xxx.*.*.* or xxx.xxx.*.* or xxx.xxx.xxx.*
```

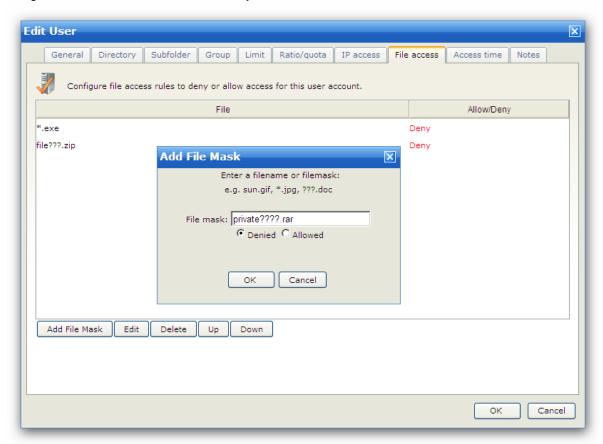
Any valid IP address value (For example, 192.168.\*.\* represents any IP between 192.168.0.0 and 192.168.255.255).

CIDR convention is also supported:

192.168.0.0/24 (represents any IP between 192.168.0.0 and 192.168.0.255)

# 5.3.8 User File Access

Configure File access rules to allow or deny access for this user.



Banned files are files that can't be accessed on server. You can specify file/path mask (?, \* supported) : \*.jpg, c:\path\images 200?\

Using this form you can define allow/deny access based on File name for this user account.

If you do not specify any file/path, this user can access all the files on the server. But if you set an allow list, the user can only access the files allowed in the list. If you set a deny list, the user can access all the files except those in the deny list. The order of the rules is very important too.

### For example

### Allow \*.rar

Can not access/store any file except \*.rar.

# Deny \*

# Allow \*.rar

Can not access/store any file, since \*.rar after \* impacts nothing.

### Rule list

The rule list shows the current list and order of file access rules. Rules can be added and removed from the list using the Add and Delete buttons.

Also, the order of the rules may be altered using the Up and Down buttons on the right of the rule list.

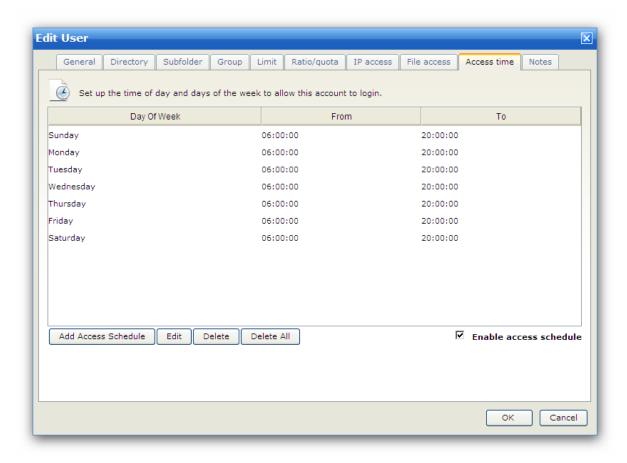
# Supported wildcards

To define access rules, you can use the wildcards? and \*.

# 5.3.9 User Access Time

This feature enables you to define access time restriction for the user account. You can define the restriction globally or for each day independently.

When you enable this option, you must add some rules for access time, otherwise this user will be banned.



### Enable access schedule

Activate or deactivate the restriction.

# **Add Access Schedule**

Add "Access Time Schedule" for this user. This user can log in at your specified time.

# Edit

Edit your "Time Schedule"

### **Delete**

Delete the selected "Time Schedule"

# **Delete All**

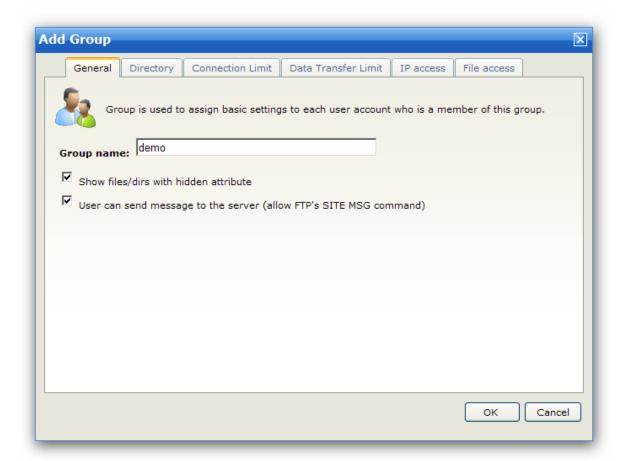
Delete all "Time Schedule". This user can never log in again unless you disable "Access Time Schedule".

# 5.4 Groups

# 5.4.1 Group Setting

Groups are a method of sharing common configuration options with multiple user accounts. Configuring a group is just like configuring a user account. Virtually every configuration option available for group can be set at the user level. In order for a user to inherit a group's settings, it must be a member of the group. Permissions and attributes inherited by a user through group membership can still be overridden

at the User level. User can be a member of multiple groups in order to acquire multiple collections of permissions, such as directory or IP access rules.



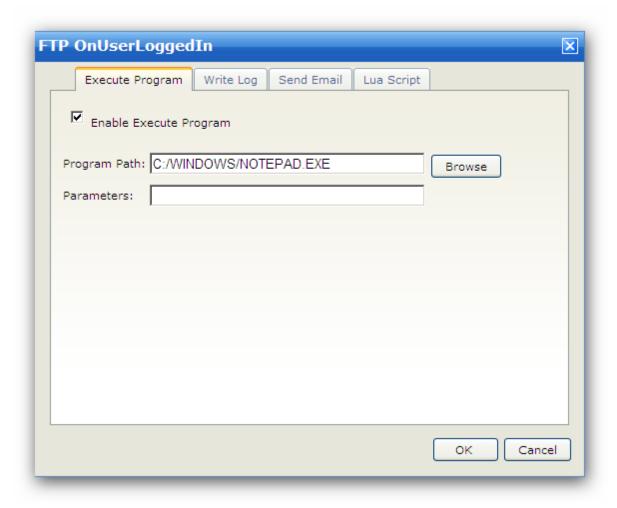
# 5.5 Event Manager

Event Manager allows the program to respond to different events, for example, when you finish uploading or downloading files, a notification email will be sent to the FTP administrator automatically.

### **Event Actions**

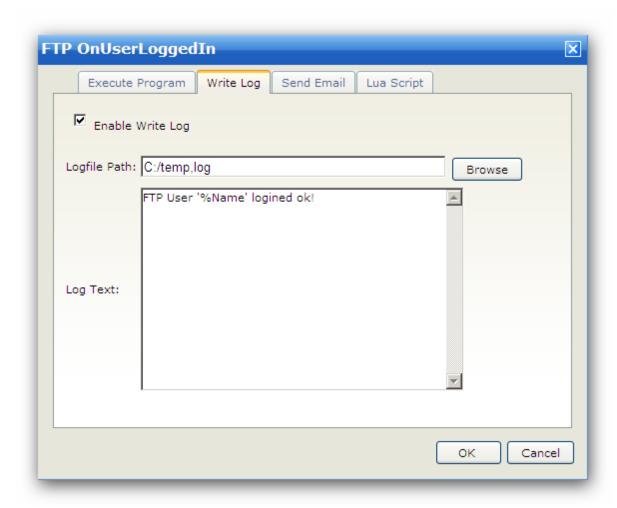
Administrators can appoint four different actions, which will be executed when an event is triggered.

# 1. Execute Command



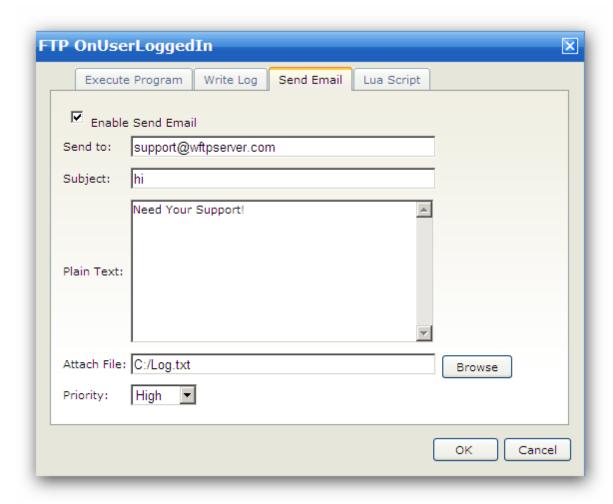
Execute command action can be configured to execute a command on a file when an event is triggered. Execute command action contains an "Executable Path" and "Command Line Parameters" parameter. Special variables may be used to send specific data pertaining to the event. Please refer to the list of these variables located under "Advanced Features->Server Variables".

# 2. Write Log



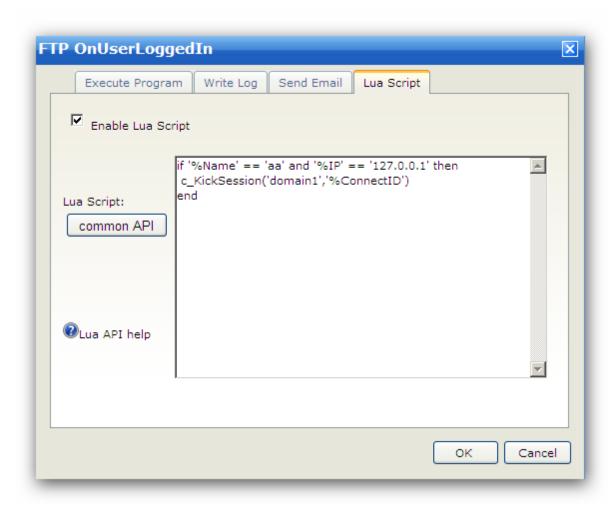
Write Log action can be configured to write text to a file when an event is triggered. Write Log action contains an "File Name" and "Log Text" parameter. Special variables may be used to send specific data pertaining to the event. Please refer to the list of these variables located under "Advanced Features->Server Variables".

# 3. Send Email



Send Email action can be configured to send an email when an event is triggered. Email action contains an "Send To", "Subject", "Email Body" and "Attach File" parameter. Special variables may be used to send specific data pertaining to the event. Please refer to the list of these variables located under "Advanced Features->Server Variables".

# 4. Lua Script



Lua Script action can be configured to run lua script when an event is triggered. Special variables could be used to send specific data pertaining to the event. You can see a list of all the server variables at "Advanced Features->Server Variables".

# Part

# 6 Advanced Features

# 6.1 Lua Language

#### **About Lua**

Lua is a powerful, fast, lightweight, embeddable scripting language. Lua combines simple procedural syntax with powerful data description constructs based on associative arrays and extensible semantics. Lua is dynamically typed, runs by interpreting bytecode for a register-based virtual machine, and has automatic memory management with incremental garbage collection, making it ideal for configuration, scripting, and rapid prototyping.

Wing FTP Server includes support for the Lua scripting language. Lua scripts can be used in several cases, such as system schedulers, domain events and web console, and it will help you to complete a complex scheduler task or a useful FTP LOGIN event or some simple console commands.

You can write Lua scripts simply by using standard Lua libraries and Wing FTP Server's Lua API 11\$. For example, if you want to add a user to the server, you can call c\_AddUser(...) API to implement it, then if you want to delete the user, just call c\_DeleteUser(...). It is simple yet powerful. For more functional work, you may require an add-on Lua library written by yourself or other people, such as LuaCOM, which allows Lua programs to use and implement objects that follow Microsoft's Component Object Model (COM) specification and use the ActiveX technology for property access and method calls.

**Simple example** (a daily scheduler task for removing inactive users in domain "default" that have not logged in within 15 days)

```
local strUserlist = c_GetUserList("default")
local userlist = Split(strUserlist,"\n")
for _,username in pairs(userlist) do
    local user = c_GetUser("default",username)
    local logintime = user.last_logintime
    local logintime_t = c_TranslateTime(logintime)
    if (os.time() - logintime_t) >= 3600*24*15 then
        c_DeleteUser("default",username)
    end
end
```

More complex example (an interesting guess number game that you can play in the web console)

```
function GuessGame(code)
    if _SESSION['quessgame_code'] == nil or code == "start" then
        print("Welcome to the NumberGuess(v1.0) game!\r\nPlease input 4 different number, such as
        local codeString = ""
        local charArray = { "0","1","2","3","4","5","6","7","8","9"}
        math.randomseed(os.time())
        math.random()
        for i=1,4 do
            local nowindex = math.random(1,table.maxn(charArray))
            codeString = codeString..charArray[nowindex]
            table.remove(charArray,nowindex)
        end
        rawset(_SESSION, "guessgame_code", codeString)
        SessionModule.save(_SESSION_ID)
    else
        local codeString = _SESSION['guessgame_code']
        local strlen = string.len(code)
        if strlen ~= 4 then
            print("Please input 4 different number!\r\n")
            return
        else
            for i=1,4 do
                local temp = string.qsub(code,string.sub(code,i,i),"")
                if string.len(temp) ~= 3 then
                    print("Please input 4 different number!\r\n")
                end
            end
            local rightnum = 0
            local rightpos = 0
            for i=1,4 do
                if string.find(codeString,string.sub(code,i,i)) then
                    rightnum = rightnum+1
                end
                if string.sub(codeString,i,i) == string.sub(code,i,i) then
                    rightpos = rightpos+1
                end
            end
            local result = string.format("%dA%dB",rightnum,rightpos);
            if result == "4A4B" then
                local count = _SESSION['guessgame_count'] or "1"
                if count <= 3 then</pre>
                    print("You are god!!! just "..tostring(count).." tries!!!")
                elseif count <= 7 then
                    print("Good guess! You got it after just "..tostring(count).." tries!")
                else
                    print("Congratulations! You got it after "..tostring(count).." tries.")
                end
                _SESSION['guessgame_code'] = nil
                _SESSION['guessgame_count'] = nil
                SessionModule.save(_SESSION_ID)
            else
                print(result)
                if _SESSION['guessgame_count'] == nil then
                    _SESSION['guessgame_count'] = 1
                else
                    _SESSION['guessgame_count'] = _SESSION['guessgame_count']+1
                end
                SessionModule.save(_SESSION_ID)
```

```
end
end
end
```

This example is written in the end of file "lua/ServerInterface.lua" and it is just a demo for fun. There are several other useful lua functions in the file "lua/ServerInterface.lua". You can add your lua function code for effective administration.

Wing FTP Server also provides a useful REST web service for administration, and you can call it for executing lua script in any external programming language.

The RESTful web service URL may look like this: http://127.0.0.1:5466/admin\_webservice.html?admin=demo&pass=demo123&cmd=xxxxx

There are three URL parameters in the above string. The first parameter "admin" means the administrator's username, the second parameter "pass" means the administrator's password, and the third parameter "cmd" means the lua script with url encoded.

If the web service call fails, it will return a string startting with "[ERROR RESULT]".

Here we will present an example in some programming languages. This example is very simple, just for calculating the number of all the domains' online sessions.

#### PHP example:

```
$strUrl = "http://127.0.0.1:5466/admin_webservice.html";
$strUrlParam = "?admin=demo&pass=demo123&cmd=";
$strLuaScript = <<<EOT
    local nSessionCnt = 0
    for _,domain in pairs(c_GetDomainList()) do
        nSessionCnt = nSessionCnt + c_GetSessionCount(domain)
    end
    print(nSessionCnt)
EOT;
$strResult = file_get_contents($strUrl.$strUrlParam.rawurlencode($strLuaScript));</pre>
```

## VB script/ASP example:

```
Set xmlHttp = CreateObject("MSXML2.ServerXMLHTTP")
strUrl = "http://127.0.0.1:5466/admin_webservice.html"
strUrlParam = "?admin=demo&pass=demo123&cmd="
strLuaScript = "local nSessionCnt = 0 "_
              &"for _,domain in pairs(c_GetDomainList()) do "_
              &" nSessionCnt = nSessionCnt + c_GetSessionCount(domain) "_
              &"end "_
              &"print(nSessionCnt)"
xmlHttp.open "GET", strUrl&strUrlParam&URLEncode(strLuaScript), False
xmlHttp.send
strResult = xmlHttp.responseText
Function URLEncode(strInput)
    For i = 1 To Len(strInput)
        intAscii = Asc(Mid(strInput, i, 1))
        If ((intAscii < 58) And (intAscii > 47)) Or ((intAscii < 91) And (intAscii > 64)) Or ((intAscii < 91) And (intAscii > 64))
            strOutput = strOutput & Chr(intAscii)
        Else
            If intAscii < 16 Then</pre>
                 strOutput = strOutput & "%0" & Trim(Hex(intAscii))
                strOutput = strOutput & "%" & Trim(Hex(intAscii))
            End If
        End If
    Next
    URLEncode = strOutput
End Function
```

## JAVA example:

```
import java.io.*;
import java.net.*;
class GetUrlContent {
   public static void main(String[] args) throws IOException {
        String strUrl = "http://127.0.0.1:5466/admin_webservice.html";
        String strUrlParam = "admin=demo&pass=demo123&cmd=";
        String strLuaScript = "local nSessionCnt = 0 "+
                              "for _,domain in pairs(c_GetDomainList()) do "+
                              " nSessionCnt = nSessionCnt + c_GetSessionCount(domain) "+
                              "print(nSessionCnt)"
        String strResult = SendGetRequest(strUrl, strUrlParam+java.net.URLEncoder.encode(strLuaScr
    public static String SendGetRequest(String url, String param) {
        String result = "";
        try {
            String urlName = url + "?" + param;
            URL U = new URL(urlName);
            URLConnection connection = U.openConnection();
            connection.connect();
            BufferedReader in = new BufferedReader(new InputStreamReader(connection.getInputStream
            String line;
            while ((line = in.readLine()) != null) {
                result += line;
            in.close();
        } catch (Exception e) {
            result = "";
        return result;
```

# 6.2 Server Lua API

The Wing FTP Server's Lua API is a set of administrator interface functions that allow you to use it in system tasks, local console, events script, lua webservice or other some way, and more information about Lua may be found here: http://www.lua.org/.

- User & Group Functions 114
- Domain Functions 121
- System Functions 135
- Get/Set Option Functions 146
- Miscellaneous Functions 151
- Administrator Functions 155

# 6.2.1 User & Group

**c\_AddUser**(string strDomain,string strUsername,string strPassword,int nProtocolType,int bEnablePassword,int bEnableAccount,int nMaxDownloadSpeed,int nMaxUploadSpeed,int nMaxConnection,int nConnectTimeout,int nIdleTimeout,int nConnectPerlp,int nPassLength,int bShowHiddenFile,int bChangePass,int bSendMessage,int nRatioCredit, int nRatioDownload, int nRatioUpload, int nRatioCountMethod,int bEnableRatio,int nCurrentQuota,int nMaxQuota,int bEnableQuota, string strNoteName, string strNoteAddress,string strNoteZip,string strNotePhone,string strNoteFax,string strNoteEmail, string strNoteMemo, table tabUserDirectory, table tabUserIpmasks, table tabUserIsergroups,int bEnableSchedule, table tabUserSchedules, int nLimitResetType, int bLimitEnableUpload, int nCurUploadSize,int nMaxUploadSize, int bEnableExpire, string strExpireTime, int nMaxDownloadSpeedPerUser, int nMaxUploadSpeedPerUser,string strSSHPubKey, table tabSubFolderPerm)

#### **Parameters**

```
[1]string the domain name
```

[2]string the user name

[3]string password with MD5 encryption

[4]int enabled protocols mask, FTP=1, FTPES(explicit SSL)=2, FTPS(implicit SSL)=4, HTTP=8, HTTP (SSL)=16, SSH=32, if only FTP and HTTP are allowed, the mask number will be 1+8=9.

[5]int enable password, 1=yes, 0=no

[6]int enable account, 1=yes, 0=no

[7]int max download speed for one session

[8]int max upload speed for one session

[9]int max number of connections

[10]int ftp connection timeout value

[11]int ftp idle timeout value

[12]int max number of connections per lp

[13]int max password length

[14]int show the hidden file?, 1=show,0=hide

[15]int user can change password?, 1=allow,0=deny

[16]int send chat message?, 1=allow,0=deny

[17]int credit ratio

[18]int download ratio

[19]int upload ratio

[20]int ratio count method, 0=count for files, 1=count for bytes

[21]int enable ratio, 1=yes, 0=no

[22]int current quota size

[23]int max quota size

[24]int enable quota, 1=yes,0=no

[25]string note name

[26]string note address

[27]string note zipcode

[28]string note phone number

[29]string note fax number

[30]string note email

[31]string note memo

[32]table a table list of user directories (user directory also is a table, its structure is formated as {m\_strDir,m\_strAlias,m\_blsHomeDir,m\_bFileRead,m\_bFileWrite,m\_bFileAppend,m\_bFileDelete, m\_bDirectoryList,m\_bDirectoryMake,m\_bDirectoryDelete,m\_bDirectoryRename,m\_bFileRename, m\_bZipFile,m\_bUnzipFile}).

[33]table a table list of user ipmasks (user ipmask also is a table, its structure is formated as {m\_strlp, m\_bRefuse}).

[34]table a table list of user filemasks list (user filemask also is a table, its structure is formated as {m\_strMask,m\_bRefuse}).

[35]table a table list of user groups (user group also is a table, its structure is formated as {m strGroupname}).

[36]int enable schedule, 1=yes,0=no

[37]table a table list of access schedulers (access scheduler also is a table, its structure is formated as {m\_nWeekday,m\_strTimefrom, m\_strTimeto}).

[38]int transfer limit reset type, 0=reset never,1=reset hourly,2=reset daily,3=reset weekly,4=reset monthly

[39]int enable upload limit, 1=yes, 0=no

[40]int current upload size

[41]int max upload size

[42]int enable download limit, 1=yes, 0=no

[43]int current download size

[44]int max download size

[45]int enable account expire, 1=yes, 0=no

[46]string account expire time string, e.g. "2010-04-01 13:30:01"

[47]int max download speed for user

[48]int max upload speed for user

[49]string ssh public key path

[50]table subfolder access rules, its structure looks like parameter 32.

#### **Return Values**

nil

#### Remarks

Add or modify a user account.

## c\_UserExist(string strDomain, string strUsername)

#### **Parameters**

[1]string the domain name

[2]string the user name

#### **Return Values**

[1]bool return true if the specified user exists in the specified domain, otherwise return false

#### Remarks

Check whether the specified user exists.

## c\_GetUser(string strDomain, string strUsername)

## **Parameters**

[1]string the domain name

[2]string the user name

### **Return Values**

[1]table a user data table formated as {username,password,max\_download,max\_upload, max\_download\_account,max\_upload\_account,max\_connection,connect\_timeout,idle\_timeout,

connect\_per\_ip,pass\_length,show\_hidden\_file,change\_pass,send\_message,ratio\_credit,ratio\_download, ratio\_upload,ratio\_count\_method,enable\_ratio,current\_quota,max\_quota,enable\_quota,note\_name, note\_address,note\_zip,note\_phone,note\_fax,note\_email,note\_memo,{Directories table},{Ipmasks table}, {Filemasks table},{Usergroups table},enable\_group,enable\_schedule,{Scheduler table},limit\_reset\_time, limit\_reset\_type,limit\_enable\_upload,cur\_upload\_size,max\_upload\_size,limit\_enable\_download, cur\_download\_size,max\_download\_size,enable\_expire,expiretime,total\_received,total\_sent,login\_count, file\_download,file\_upload,failed\_download,failed\_upload,last\_loginip,last\_logintime,protocol\_type, enable\_password,enable\_account,ssh\_pubkey\_path,{Subfolder Rules table}}.

#### Remarks

Return a table of user data if the specified user exists, otherwise return nil.

c\_DeleteUser(string strDomain, string strUsername)

#### **Parameters**

[1]string the domain name [2]string the user name

#### **Return Values**

nil

#### Remarks

Delete a user.

c\_CopyUser(string strDomain, string strUsername, string strNewUsername)

#### **Parameters**

[1]string the domain name [2]string the source user name [3]string the destination user name

#### **Return Values**

[1]int the result code, 1=success, -1=source user not exists, -2=destination user already exists.

#### Remarks

Copy a user.

**c\_AddUserDirectory**(string strDomain, string strUsername, string strDirectory, string strAlias, bool blsHomeDir, bool bFileRead, bool bFileWrite, bool bFileAppend, bool bFileDelete, bool bDirectoryList, bool bDirectoryMake, bool bDirectoryDelete, bool bDirectoryRename, bool bFileRename, bool bZipFile, bool bUnzipFile)

### **Parameters**

[1]string the domain name
[2]string the user name
[3]string the directory path
[4]string alias of the directory, set "/" for home directory.
[5]bool is home directory?
[6]bool can user read files?
[7]bool can user write files?

```
[8]bool can user resume files uploading?
[9]bool can user delete files?
[10]bool can user see files listing?
[11]bool can user make a directory?
[12]bool can user remove a directory?
[13]bool can user rename a directory?
[14]bool can user rename a file?
[15]bool can user zip file or folder?
```

[16]bool can user unzip a zip file?

### **Return Values**

nil

### Remarks

Add a home directory or virtual directory for user account.

## c\_ResetUserStatistic(string strDomain, string strUsername)

#### **Parameters**

[1]string the domain name [2]string the user name

## **Return Values**

nil

## Remarks

Reset user's statistics.

# c\_GetUserList(string strDomain)

### **Parameters**

[1]string the domain name

#### **Return Values**

[1]string username list string

## Remarks

Returns user list, username in the list is separated with a carriage return sign.

# c\_GetUserListPage(string strDomain, int nPageNum)

## **Parameters**

[1]string the domain name [2]int the page number

### **Return Values**

[1]string username list string

## Remarks

This function is similar to c\_GetUserList(), the difference is that it will be used when storing user data via

database, and the 2nd parameter tells records offset (20 records/page, 0=1~20, 1=21~40...).

## c\_GetUserPageCount(string strDomain)

#### **Parameters**

[1]string the domain name

#### **Return Values**

[1]int the total records of users

[2]int the total pages (20 records per page)

#### Remarks

Returns the total records of users in database, and the total pages (20 records per page).

**c\_AddGroup**(string strDomain,string strGroupname, int nMaxDownloadSpeed,int nMaxUploadSpeed,int nMaxConnection,int nConnectTimeout,int nIdleTimeout,int nConnectPerlp,int nConnectPerlpForUser,int bShowHiddenFile,int bSendMessage,table tabUserDirectory, table tabUserIpmasks, table tabUserFilemasks, int nMaxDownloadSpeedPerUser,int nMaxUploadSpeedPerUser,int nMaxDownloadSpeedPerGroup, table tabUserList, table tabSubfolderPerm)

#### **Parameters**

[1]string the domain name

[2]string the group name

[3]int max download speed for one session

[4]int max upload speed for one session

[5]int max number of connections

[6]int ftp connect timeout value

[7]int ftp idle timeout value

[8]int max number of connections per IP for group

[9]int max number of connections per user account

[10]int max number of connections per IP for user account

[11]int whether to show the hidden file, 1=show, 0=hide

[12]int whether to send message, 1=allow, 0=deny

[13]table a table list of group directories (group directory also is a table, its structure is formated as {m\_strDir,m\_strAlias,m\_blsHomeDir,m\_bFileRead,m\_bFileWrite,m\_bFileAppend,m\_bFileDelete, m\_bDirectoryList,m\_bDirectoryMake,m\_bDirectoryDelete,m\_bDirectoryRename,m\_bFileRename, m\_bZipFile,m\_bUnzipFile}).

[14]table a table list of group ipmasks (group ipmask also is a table, its structure is formated as {m\_strlp,m\_bRefuse}).

[15]table a table list of group filemasks (group filemask also is a table, its structure is formated as {m strMask,m bRefuse}).

[16]int max download speed for specified user

[17]int max upload speed for specified user

[18]int max download speed for this group

[19]int max upload speed for this group

[20]table userlist belong to this group, like { {"aa"}, {"bb"}, {"cc"} }

[21]table subfolder access rules, its structure looks like parameter 13

#### **Return Values**

nil

#### Remarks

Add or modify a user group.

## c\_GroupExist(string strDomain, string strGroupname)

#### **Parameters**

[1]string the domain name [2]string the group name

#### **Return Values**

[1]bool return true if the specified group exists in the specified domain, otherwise return false

#### Remarks

Check whether the specified group exists.

## c\_GetGroup(string strDomain, string strGroupname)

### **Parameters**

[1]string the domain name [2]string the group name

#### **Return Values**

[1]table a table of group, its structure is formated as {groupname,max\_download,max\_upload, max\_download\_account,max\_upload\_account,max\_connect\_imeout, idle\_timeout, connect\_per\_ip, max\_session\_per\_user, max\_ipsession\_for\_user, show\_hidden\_file,send\_message, {directory table},{pmask table},{filemask table}, total\_received, total\_sent, login\_count, file\_download, file\_upload, failed\_upload, {Userlist table}}.

## Remarks

Return a table of group data if the specified group exists, otherwise return nil.

# c\_DeleteGroup(string strDomain, string strGroupname)

#### **Parameters**

[1]string the domain name [2]string the group name

## **Return Values**

nil

### Remarks

Delete a group.

## **c\_CopyGroup**(string strDomain, string strGroupname, string strNewGroupname)

#### **Parameters**

[1]string the domain name[2]string the source group name

[3]string the destination group name

## **Return Values**

[1]int the result code, 1=success, -1=source group not exists, -2=destination group already exists.

#### Remarks

Copy a group.

**c\_AddGroupDirectory**(string strDomain, string strGroupname, string strDirectory, string strAlias, bool blsHomeDir, bool bFileRead, bool bFileWrite, bool bFileAppend, bool bFileDelete, bool bDirectoryList, bool bDirectoryMake, bool bDirectoryDelete, bool bDirectoryRename, bool bFileRename, bool bZipFile, bool bUnzipFile)

#### **Parameters**

[1]string the domain name

[2]string the group name

[3]string the directory path

[4]string alias of the directory, set "/" for home directory.

[5]bool is home directory?

[6]bool can user read files?

[7]bool can user write files?

[8]bool can user resume files uploading?

[9]bool can user delete files?

[10]bool can user see files listing?

[11]bool can user make a directory?

[12]bool can user remove a directory?

[13]bool can user rename a directory?

[14]bool can user rename a file?

[15]bool can user zip file or folder?

[16]bool can user unzip a zip file?

### **Return Values**

nil

## Remarks

Add virtual directory for a group.

c\_ResetGroupStatistic(string strDomain, string strGroupname)

## **Parameters**

[1]string the domain name

[2]string the group name

## **Return Values**

nil

### Remarks

Reset group's statistics.

## c\_GetGroupList(string strDomain)

#### **Parameters**

[1]string the domain name

#### **Return Values**

[1]string groupname list string

#### Remarks

Returns the group list, and group name in the list is separated with a carriage return sign.

# c\_GetGroupListPage(string strDomain, int nPageNum)

#### **Parameters**

[1]string the domain name [2]int the page number

#### **Return Values**

[1]string groupname list string

### Remarks

This function is similar to c\_GetGroupList(), the difference is that it will be used when storing group data via database, and the 2nd parameter tells records offset (20 records/page, 0=1~20, 1=21~40...).

## c\_GetGroupPageCount(string strDomain)

#### **Parameters**

[1]string the domain name

## **Return Values**

[1]int the total records of groups

[2]int the total pages (20 records per page)

### Remarks

Returns the total records of groups in database, and the total pages (20 records per page).

## 6.2.2 Domain Function

## c\_AccessDataWay(string strDomain)

### **Parameters**

[1]string the domain name

## **Return Values**

[1]int the method for database storage of accounts information, 1=xml file, 2=mysql, 3=ODBC

#### Remarks

Returns method of database storage, 1=xml file, 2=mysql, 3=ODBC

## c\_ResetUserData(string strDomain)

#### **Parameters**

[1]string the domain name

#### **Return Values**

nil

#### Remarks

Reset all the user/group data in the specified domain.

# c\_ReconnectDB(string strDomain)

#### **Parameters**

[1]string the domain name

#### **Return Values**

nil

#### Remarks

Reconnects the database.

## c\_TestMysql(string strDomain)

### **Parameters**

[1]string the domain name

### **Return Values**

[1]bool return true if mysql connection is successful, otherwise return false

## Remarks

Test mysql connection.

## c\_TestODBC(string strDomain)

### **Parameters**

[1]string the domain name

#### **Return Values**

[1]bool return true if ODBC connection is successful, otherwise return false

## Remarks

Test ODBC connection.

**c\_KickSession**(string strDomain,int nld,int nKickWay,int nBlockMin,int nAddToUser,int nAddToGroup,int nAddToDomain,int nDisableAccount,string strSendMsg)

### **Parameters**

[1]string the domain name

[2]int the session ID

[3]int the kick way,0=disconnect,1=disconnect and ban IP for minutes, 2=disconnect and block IP

### permanently

[4]int the minutes number for banning IP.

[5]int whether to add this IP to user's IP-block list, 1=yes, 0=no.

[6]int whether to add this IP to group's IP-block list, 1=yes, 0=no.

[7]int whether to add this IP to domain's IP-block list, 1=yes, 0=no.

[8]int whether to disable user account, 1=yes, 0=no.

[9]string the message string will be sent to ftp client.

#### **Return Values**

[1]int the result code,1=success, 0=failure

#### Remarks

Kill the specified session with full options.

## c\_KickSessionByName(string strDomain, string strName)

#### **Parameters**

[1]string the domain name

[2]string the user name

#### **Return Values**

[1]int the result code,1=success, 0=failure

#### Remarks

Kill the online sessions of same names as parameter "strName".

## c\_KickAllSessions(string strDomain)

### **Parameters**

[1]string the domain name

## **Return Values**

[1]int the result code,1=success, 0=failure

#### Remarks

Kill all the online sessions.

## c\_GetConnectionsList(string strDomain)

### **Parameters**

[1]string the domain name

## **Return Values**

[1]table an online session(formatted as {id, username, protocol, ip, lastcommand,directory}) list table.

#### Remarks

Return a table list of online sessions.

## c\_GetDomainLog(string strDomain)

#### **Parameters**

[1]string the domain name

#### **Return Values**

[1]string domain log text

#### Remarks

Get the log text of a specified domain.

**c\_SetFTPEvent**(string strDomain,int nEventType,int bExecute,string strExeFilePath,string strParameter,int bLogFile,string strLogFilePath,string strLogText,int bSendMail,string strMailTo,string strSubject,string strPlainText,string strAttachFile,int nPriority,int bLuaScript,string strLuaScriptText)

#### **Parameters**

[1]string the domain name

[2]int the ftp event type, you can check them at the bottom.

[3]int whether to execute a program,1=yes, 0=no.

[4]string the physical path of third-party program.

[5]string the parameters of third-party program.

[6]int whether to write something to a log file,1=yes, 0=no.

[7]string the path of log file.

[8]string the log text.

[9]int whether to send an email,1=yes, 0=no.

[10]string the receiver's email address.

[11]string the email's subject.

[12]string the email's plain text.

[13]string the email's attachment file path.

[14]int the priority for sending email, 1=normal, 2=high, 3=low

[15]int whether to execute lua script,1=yes, 0=no.

[16]string the lua script content.

## **Return Values**

nil

### Remarks

This function is used for configuring the ftp event's settings.

# c\_GetFTPEvent(string strDomain,int nEventType)

#### **Parameters**

[1]string the domain name

[2]int the ftp event type, you can check them at the bottom.

## **Return Values**

[1]int whether to execute a program, 1=yes, 0=no.

[2]string the physical path of third-party program.

[3]string the parameters of third-party program.

[4]int whether to write something to a log file,1=yes, 0=no.

[5]string the path of log file.

[6]string the log text.

[7]int whether to send an email,1=yes, 0=no.

[8]string the receiver's email address.

[9]string the email's subject.

[10]string the email's plain text.

[11]string the email's attachment file path.

[12]int the priority for sending email, 1=normal, 2=high, 3=low

[13]int whether to execute lua script,1=yes, 0=no.

[14]string the lua script content.

#### Remarks

Get specified ftp event's settings.

**c\_SetSSHEvent**(string strDomain,int nEventType,int bExecute,string strExeFilePath,string strParameter,int bLogFile,string strLogFilePath,string strLogText,int bSendMail,string strMailTo,string strSubject,string strPlainText,string strAttachFile,int nPriority,int bLuaScript,string strLuaScriptText)

#### **Parameters**

same as c\_SetFTPEvent()

#### **Return Values**

nil

#### Remarks

This function is used for configuring the ssh event's settings.

c\_GetSSHEvent(string strDomain, int nEventType)

#### **Parameters**

[1]string the domain name

[2]int the ssh event type, you can check them at the bottom.

#### **Return Values**

same as c\_SetFTPEvent()

#### Remarks

Get specified ssh event's settings.

**c\_SetHTTPEvent**(string strDomain,int nEventType,int bExecute,string strExeFilePath,string strParameter,int bLogFile,string strLogFilePath,string strLogText,int bSendMail,string strMailTo,string strSubject,string strPlainText,string strAttachFile,int nPriority,int bLuaScript,string strLuaScriptText)

### **Parameters**

same as c\_SetFTPEvent()

#### **Return Values**

nil

## Remarks

This function is used for configuring http event's settings.

## c\_GetHTTPEvent(string strDomain,int nEventType)

#### **Parameters**

[1]string the domain name

[2]int the http event type, you can check them at the bottom.

#### **Return Values**

same as c\_SetFTPEvent()

#### Remarks

Get specified http event's settings.

# c\_GetListenerList(string strDomain)

#### **Parameters**

[1]string the domain name

### **Return Values**

[1]table a domain listener(formatted as {ID,Type,Ip\_Address,Port,Is\_Listening}) list table.

#### Remarks

Return a table list of domain listeners.

## c\_AddListener(string strDomain,int nListenerType,string strListenerIp,int nListenerPort)

### **Parameters**

[1]string the domain name

[2]int listener type,1=FTP, 2=FTPS, 3=HTTP, 4=HTTPS, 5=SSH.

[3]string listener's IP address, \* for all local addresses.

[4]int listener port

#### **Return Values**

[1]int the result code, 0=success, 1=invalid IP, 2=invalid port, 3=invalid index, 4=listener exists, 99=unknown error.

## Remarks

Add a domain listener.

## c\_DeleteListener(string strDomain,int nIndex)

#### **Parameters**

[1]string the domain name

[2]int listener index

#### **Return Values**

[1]int the result code, 0=success, 1=invalid IP, 2=invalid port, 3=invalid index, 4=listener exists, 99=unknown error.

#### Remarks

Delete a domain listener.

**c\_UpdateListener**(string strDomain,int nIndex,int nListenerType,string strListenerIp,int nListenerPort)

### **Parameters**

[1]string the domain name

[2]int listener index

[3]int listener type,1=FTP, 2=FTPS, 3=HTTP, 4=HTTPS, 5=SSH.

[4]string listener's IP address, \* for all local addresses.

[5]int listener port

### **Return Values**

[1]int the result code, 0=success, 1=invalid IP, 2=invalid port, 3=invalid index, 4=listener exists, 99=unknown error.

### Remarks

Modify a domain listener by specified index.

## c\_GetSfvDirList(string strDomain)

### **Parameters**

[1]string the domain name

#### **Return Values**

[1]table the SFV directory list table.

#### Remarks

Return SFV directory list.

## c\_GetIPMaskList(string strDomain)

## **Parameters**

[1]string the domain name

#### **Return Values**

[1]table the domain IPmask(formatted as {ip,refuse}) list table.

#### Remarks

Return domain's IPmask list.

# c\_GetFileMaskList(string strDomain)

## **Parameters**

[1]string the domain name

### **Return Values**

[1]table the domain Filemask(formatted as {filename,refuse}) list table.

#### Remarks

Return domain's filemask list.

## c\_SetSfvDirList(string strDomain,table tabSfvDir)

#### **Parameters**

[1]string the domain name[2]table the SFV directory list table

### **Return Values**

nil

#### Remarks

Set SFV directory list.

# c\_SetIPMaskList(string strDomain,table tablpMask)

#### **Parameters**

[1]string the domain name

[2]table the IPmask list table (formatted as {ip,refuse})

#### **Return Values**

nil

#### Remarks

Set domain's IPmask list.

## c\_SetFileMaskList(string strDomain,table tabFileMask)

#### **Parameters**

[1]string the domain name

[2]table the filemask list table (formatted as {filename,refuse})

## **Return Values**

nil

#### Remarks

Set domain's filemask list.

# c\_GetTransferLimit(string strDomain)

### **Parameters**

[1]string the domain name

### **Return Values**

[1]table the transfer limit table formatted as {enable\_upload\_never,cur\_upload\_size\_never, max\_upload\_size\_never,enable\_download\_never,cur\_download\_size\_never, max\_download\_size\_never,enable\_upload\_hourly,cur\_upload\_size\_hourly,max\_upload\_size\_hourly, enable\_download\_hourly,cur\_download\_size\_hourly,max\_download\_size\_hourly, enable\_upload\_daily,cur\_upload\_size\_daily,max\_upload\_size\_daily,enable\_download\_daily,

cur\_download\_size\_daily,max\_download\_size\_daily,enable\_upload\_weekly, cur\_upload\_size\_weekly,max\_upload\_size\_weekly,enable\_download\_weekly, cur\_download\_size\_weekly,max\_download\_size\_weekly,enable\_upload\_monthly, cur\_upload\_size\_monthly,max\_upload\_size\_monthly,enable\_download\_monthly, cur\_download\_size\_monthly,max\_download\_size\_monthly}.

#### Remarks

Return a table of transfer limit settings.

# c\_SetTransferLimit(string strDomain,table tabTransferLimit)

### **Parameters**

[1]string the domain name

[2]table the transfer limit table (like the return value format of c\_GetTransferLimit() ).

## **Return Values**

nil

#### Remarks

Set domain's transfer limit.

## c\_StartDomain(string strDomain)

### **Parameters**

[1]string the domain name

### **Return Values**

nil

## Remarks

Put the domain online.

# c\_StopDomain(string strDomain,int nStopMode)

#### **Parameters**

[1]string the domain name

[2]int the options, 0=disconnect all clients, 1=wait for clients to disconnect, 2=wait for clients to terminate their transfer.

## **Return Values**

nil

### Remarks

Put the domain offline.

## c\_lsDomainOnline(string strDomain)

#### **Parameters**

[1]string the domain name

#### **Return Values**

[1]bool return true if the domain is online, otherwise return false

#### Remarks

Check whether the domain is online.

## c\_GetSessionCount(string strDomain)

### **Parameters**

[1]string the domain name

#### **Return Values**

[1]int the current session number

#### Remarks

Return the current session number in the specified domain.

## c\_GetSessionLiveTime(string strDomain,int nSessionID)

### **Parameters**

[1]string the domain name [2]int the client session ID

### **Return Values**

[1]int the live time of this session

## Remarks

Return session's living time.

## c\_GetSessionStatistic(string strDomain,int nSessionID)

## **Parameters**

[1]string the domain name [2]int the client session ID

#### **Return Values**

[1]table session statistics table formatted as {down\_speed,down\_averagespeed,down\_bytes, down\_files,up\_speed,up\_averagespeed,up\_bytes,up\_files}.

## Remarks

Get session statistics.

## c\_GetDomainStatistic(string strDomain)

### **Parameters**

[1]string the domain name

### **Return Values**

[1]table domain statistics table formatted as {running\_time,current\_session,max\_session, last24hour\_session,session\_averagesec,session\_maxsec,total\_session, down\_speed,down\_averagespeed,down\_bytes,down\_files,up\_speed,up\_averagespeed,up\_bytes, up\_files}.

#### Remarks

Get domain statistics.

## c\_SendSiteMsg(string strDomain,int nSessionID,string strMessage)

#### **Parameters**

[1]string the domain name

[2]int the client session ID

[3]string the message text

## **Return Values**

nil

#### Remarks

Send a message to the client(with FTP/FTPS protocol).

# c\_BroadcastSiteMsg(string strDomain, string strMessage)

### **Parameters**

[1]string the domain name

[2]string the message text

## **Return Values**

nil

### Remarks

Broadcast a message to all the clients(with FTP/FTPS protocol).

# c\_GetSiteMsg(string strDomain,int nSessionID)

### **Parameters**

[1]string the domain name

[2]int the client session ID

### **Return Values**

[1]string the message text

## Remarks

Return all the chatting message of the specified client.

## c\_CreateDomainLogo(string strDomain, string strLogoPath)

#### **Parameters**

[1]string the domain name

[2]string the image path of your domain logo.

## **Return Values**

nil

#### Remarks

Create a customized logo for the specified domain.

# c\_GetTempBlocklpList(string strDomain)

#### **Parameters**

[1]string the domain name

#### **Return Values**

[1]table temporary banned IP(formatted as {ip,sec}) list table

#### Remarks

Get the temporary banned IP list.

## **c\_AddTempBlocklp**(string strDomain, string strBanIP, int nBanSec)

### **Parameters**

[1]string the domain name

[2]string the banned IP address

[3]int value of banned seconds

### **Return Values**

[1]bool return true if added the temporary banned IP successfully, otherwise return false

## Remarks

Add a temporary banned IP.

## c\_DelTempBlocklp(string strDomain,string strBanIP)

#### **Parameters**

[1]string the domain name

[2]string the banned IP address

## **Return Values**

[1]bool return true if removed the temporary banned IP successfully, otherwise return false

## Remarks

Remove a temporary banned IP.

## c\_GetUserAbsolutePath(string strDomain,string strUsername,string strNowDir)

## **Parameters**

[1]string the domain name

[2]string the user name

[3]string the current user directory

### **Return Values**

[1]string return the physical path of current user directory

#### Remarks

Get the physical path of current user directory.

## c\_GetChartData(string strDomain,int nTimeType,int nTrafficType)

#### **Parameters**

```
[1]string the domain name
```

[2]int time period type 0:last 5minutes, 1:last 5hours, 2:last 10days

[3]int traffic type 0: download speed, 1: upload speed, 2: session number

### **Return Values**

[1]string return the input data for graphs chart of real-time server traffics.

#### Remarks

Get the input data for graphs chart of real-time server traffics.

**c\_SetDomainPasvOption**(string strDomain,int nPasvModeWay,string strPasvFixlp,string strPasvDnslp,int nPasvRefIntval,int nEnableUPnP,int nMinPasvPort,int nMaxPasvPort)

#### **Parameters**

[1]string the domain name

[2]int get server's IP way in ftp pasv mode transfer

[3]string your server's IP on internet

[4]string the specified web url that will resolve your internet IP.

[5]string the specified dynamic DNS, will resolve the hostname as my.dnsdns.org.

[6]int the refreshed interval value for getting server's IP.

[7]int enable auto-forwarding pasv ports to router, 1=yes, 0=no.

[8]int the pasy ports range from.

[9]int the pasy ports range to.

## **Return Values**

nil

## Remarks

This function is used to change domain's FTP PASV options.

```
//FTP Event Type(used in c_SetFTPEvent, c_GetFTPEvent)

FTP_USER_LOGIN_EVENT = 0 //When user has successfully logged in

FTP_USER_DISCONNECT_EVENT = 1 //When user leaves the server

FTP_USER_CONNECT_TIMEOUT_EVENT = 2 //When user has been disconnected for no command
```

sending

```
FTP DIR CREATE EVENT = 3
                                         //When a directory has been created
                                         //When a directory has been deleted
FTP DIR DELETE EVENT = 4
                                         //When a user failed to authenticate(exceed limit
FTP_EXCEED_USERPASS_EVENT = 5
USER/PASS)
FTP FILE BANNED EVENT = 6
                                         //When users attempt to upload a banned file
FTP FILE DELETE EVENT = 7
                                         //When a file has just been deleted
                                         //When a file has just been downloaded
FTP_FILE_DOWNLOAD_EVENT = 8
FTP_FILE_RENAME_EVENT = 9
                                         //When a file has been renamed
FTP FILE UPLOAD EVENT = 10
                                         //When a file was just uploaded
FTP QUOTA EXCEED EVENT = 11
                                         //When quota has reached maximum quota allowed
FTP TOOMANY CONNECTION PERIP EVENT = 12
                                                       //When too many connections have
logged in with same IP
FTP TOOMANY CONNECTION PERACCOUT EVENT = 13
                                                     //When too many connections have
logged in with same account
FTP IP BANNED EVENT = 14
                                         //When a banned IP try to login on this server
FTP SITE COMMAND MESSAGE = 15 //When user use site command to send a message to
the server
FTP SITE COMMAND CHANGE PASSWORD = 16
                                                       //When user use site command to
change password
FTP EXCEED LIMIT = 17
                                                       //When user exceeds transfer limit
FTP EXCEED MAX SESSION ON GROUP = 18
                                                       //When exceed Maximum number of
sessions for group
FTP EXCEED MAX SESSION PER IP ON GROUP = 19
                                                       //When exceed Maximum sessions
per IP address for group
FTP_EXCEED_MAX_SESSION_ON_DOMAIN = 20
                                                       //When exceed Maximum number of
sessions on domain
FTP EXCEED MAX SESSION PER IP ON DOMAIN = 21
                                                      //When exceed Maximum sessions
per IP address on domain
//SSH Event Type(used in c_SetSSHEvent,c_GetSSHEvent)
                                //When user has successfully logged in //When user leaves the server
SSH USER LOGIN EVENT = 0
SSH USER DISCONNECT EVENT = 1
SSH USER CONNECT TIMEOUT EVENT = 2 //When user has been disconnected for no command
sending
SSH DIR CREATE EVENT = 3
                                         //When a directory has been created
                                         //When a directory has been deleted
SSH_DIR_DELETE_EVENT = 4
                                         //When a user failed to authenticate(exceed limit
SSH_EXCEED_USERPASS_EVENT = 5
USER/PASS)
SSH FILE BANNED EVENT = 6
                                         //When users attempt to upload a banned file
SSH FILE DELETE EVENT = 7
                                         //When a file has just been deleted
SSH_FILE_DOWNLOAD_EVENT = 8
                                         //When a file has just been downloaded
                                         //When a file has been renamed
SSH FILE RENAME EVENT = 9
                                         //When a file was just uploaded
SSH FILE UPLOAD EVENT = 10
SSH QUOTA EXCEED EVENT = 11
                                         //When guota has reached maximum guota allowed
SSH_TOOMANY_CONNECTION_PERIP_EVENT = 12
                                                       //When too many connections have
logged in with same IP
SSH_TOOMANY_CONNECTION_PERACCOUT_EVENT = 13
                                                       //When too many connections have
logged in with same account
SSH IP BANNED EVENT = 14
                                         //When a banned IP try to login on this server
                                         //When user exceed transfer limit
SSH EXCEED LIMIT = 15
SSH EXCEED MAX SESSION ON GROUP = 16
                                                       //When exceed Maximum number of
sessions for group
SSH_EXCEED_MAX_SESSION_PER_IP_ON_GROUP = 17
                                                       //When exceed Maximum sessions
```

```
per IP address for group
SSH_EXCEED_MAX_SESSION_ON_DOMAIN = 18
                                                     //When exceed Maximum number of
sessions on domain
SSH_EXCEED_MAX_SESSION_PER_IP_ON_DOMAIN = 19
                                                     //When exceed Maximum sessions
per IP address on domain
//HTTP Event Type(used in c_SetHTTPEvent,c_GetHTTPEvent)
WEB USER LOGIN EVENT = 0
                                       //When user has successfully logged in
WEB DIR CREATE EVENT = 1
                                        //When a directory has been created
WEB DIR DELETE EVENT = 2
                                        //When a directory has been deleted
                                        //When a user failed to authenticate(exceed limit
WEB EXCEED USERPASS EVENT = 3
USER/PASS)
                                        //When users attempt to upload a banned file
WEB FILE BANNED EVENT = 4
WEB FILE DELETE EVENT = 5
                                        //When a file has just been deleted
WEB_FILE_DOWNLOAD_EVENT = 6
                                        //When a file has just been downloaded
                                        //When a file has been renamed
WEB FILE RENAME EVENT = 7
                                        //When a file was just uploaded
WEB FILE UPLOAD EVENT = 8
                                        //When quota has reached maximum quota allowed
WEB QUOTA EXCEED EVENT = 9
WEB_TOOMANY_CONNECTION_PERIP_EVENT = 10
                                                      //When too many connections have
logged in with same IP
WEB TOOMANY CONNECTION PERACCOUT EVENT = 11 //When too many connections have
logged in with same account
WEB IP BANNED EVENT = 12
                                        //When a banned IP try to login on this server
WEB CHANGE PASSWORD = 13
                                        //When user changes his password
WEB EXCEED LIMIT = 14
                                               //When user exceeds transfer limit
WEB_EXCEED_MAX_SESSION_ON_GROUP = 15
                                               //When exceed Maximum number of sessions
for aroup
WEB EXCEED MAX SESSION PER IP ON GROUP = 16
                                                      //When exceed Maximum sessions
per IP address for group
WEB_EXCEED_MAX_SESSION_ON_DOMAIN = 17 //When exceed Maximum number of sessions
on domain
WEB EXCEED MAX SESSION PER IP ON DOMAIN = 18
                                                      //When exceed Maximum sessions
per IP address on domain
```

# 6.2.3 System Function

## c\_ExitServer()

#### **Parameters**

nil

#### **Return Values**

nil

## Remarks

Safely shut down the server process.

## c StartServer()

#### **Parameters**

nil

#### **Return Values**

nil

#### Remarks

Put all the domains online.

## c\_StopServer()

#### **Parameters**

nil

#### **Return Values**

nil

### Remarks

Put all the domains offline.

## c\_ReplaceGlobalVar(string strSource)

### **Parameters**

[1]string the source string

#### **Return Values**

[1]string the string with replaced values.

### Remarks

Replace all the global variables of the source string and return it.

**c\_SendMail**(string strTo,string strSubject,string strPlainText,string strAttach,string strSmtpName, bool bHTML)

## **Parameters**

[1]string the receiver's email addresses, multiple email addresses can be separated by a comma

[2]string mail subject

[3]string mail content

[4]string attach file path

[5]string the smtp configuration name

[6]bool mail content is HTML?, true=yes, false=no.

## **Return Values**

[1]bool return true if email is sent successfully, otherwise return false

# Remarks

Send an email with a few options.

**c\_SendMailComplete**(string strTo,string strSubject,string strPlainText,string strAttach,string strSenderEmail,string strSenderName,

 $string\ strSmtpServer, int\ nSmtpPort, string\ strSmtpUserName, string\ strSmtpPassword, bool$ 

bSmtpNeedAuth,bool bUseSsl,bool bHTML)

## **Parameters**

[1]string the receiver's email addresses, multiple email addresses can be separated by a comma

[2]string mail subject

[3]string mail content

[4]string attach file path

[5]string the sender's email address

[6]string the sender's name

[7]string the smtp server's address

[8]int the smtp server's port

[9]string the smtp server's username

[10]string the smtp server's password

[11]bool need auth?, true=yes, false=no.

[12]bool need SSL?, true=yes, false=no.

[13]bool mail content is HTML?, true=yes, false=no.

#### **Return Values**

[1]bool return true if email is sent successfully, otherwise return false

### Remarks

Send an email with full options.

## c\_GetVersion()

## **Parameters**

nil

#### **Return Values**

[1]string the installed version of Wing FTP Server, such as "3.0.0"

### Remarks

Get the installed version of Wing FTP Server.

## c\_GetLastVersion()

## **Parameters**

nil

## **Return Values**

[1]string the latest version of Wing FTP Server, such as "3.0.0"

### Remarks

Get the latest version of Wing FTP Server.

## c\_GetOsType()

## **Parameters**

nil

### **Return Values**

[1]string the current operating system type, such as "Windows"

#### Remarks

Get the current operating system type.

# c\_ClearThumbCache()

## **Parameters**

nil

## **Return Values**

nil

#### Remarks

Clear all the thumbnail images cache.

# c\_CreateCustomLogo()

### **Parameters**

[1]string the image path of your company logo.

## **Return Values**

nil

## Remarks

Create a custom logo for all domains.

## c\_ResetDefaultLogo()

## **Parameters**

nil

# **Return Values**

nil

#### Remarks

Reset to the default logo for all domains.

## c\_GetGloballPMaskList()

### **Parameters**

nil

## **Return Values**

[1]table the domain IPmask(formatted as {ip,refuse}) list table.

#### Remarks

Return entire server's ipmask list.

# c\_GetGlobalFileMaskList()

#### **Parameters**

nil

### **Return Values**

[1]table the domain Filemask(formatted as {filename,refuse}) list table.

### Remarks

Return entire server's filemask list.

## c\_SetGloballPMaskList(table tablpMask)

### **Parameters**

[1]table the IPmask list table (formatted as {ip,refuse})

### **Return Values**

nil

### Remarks

Set entire server's ipmask list.

# c\_SetGlobalFileMaskList(table tabFileMask)

## **Parameters**

[1]table the Filemask list table (formatted as {filename,refuse})

#### **Return Values**

nil

## Remarks

Set entire server's filemask list.

# c\_GetSystemLog()

### **Parameters**

nil

## **Return Values**

[1]string system log text

## Remarks

Get all the system log text.

# c\_AddSystemLog(string strLog,int nType)

## **Parameters**

[1]string the system log text

[2]int the system log type, you can check them at the bottom.

## **Return Values**

nil

#### Remarks

Add a system log.

## c\_GetServerStatistic()

#### **Parameters**

nil

#### **Return Values**

[1]table server statistics table formatted as {running\_time,current\_session,max\_session, last24hour\_session,session\_averagesec,session\_maxsec,total\_session, down\_speed, down\_averagespeed,down\_bytes,down\_files,up\_speed,up\_averagespeed,up\_bytes,up\_files}.

#### Remarks

Get server statistics.

**c\_CreateSSLCertificate**(string strFileName,string strFilePath,int nKeySize,string strCountry, string strState,string strLocality,string strOrganization,string strUnit,string strCertName,string strEmail, string strPassword)

#### **Parameters**

[1]string the certificate file name

[2]string the output directory

[3]int key size

[4]string 2-digit country code

[5]string full state or province

[6]string locality(city)

[7]string organization

[8]string organization unit

[9]string common name(your name or your server's hostname)

[10]string contact e-mail

[11]string SSL key password

### **Return Values**

[1]bool return true if created SSL certificate file successfully, otherwise return false

#### Remarks

This function is used for creating an SSL certificate file .

## c GetSSLCertList()

### **Parameters**

nil

## **Return Values**

[1]table a table list of all the SSL configuration (formatted as {name,state})

### Remarks

Return all the SSL certificate configurations.

## **c GetSSLCertificate**(string strName)

### **Parameters**

[1]string the certificate configuration name

### **Return Values**

[1]table a table formatted as {ssl\_certpath,ssl\_keypath,ssl\_password}.

#### Remarks

Get an SSL certificate configuration table on success, or nil on error.

# c\_CheckSSLCertificate(string strName)

## **Parameters**

[1]string the certificate configuration name

### **Return Values**

[1]bool return true if SSL certificate is valid, otherwise return false

#### Remarks

Check whether the specified SSL certificate is valid.

# **c\_AddSSLCertificate**(string strName, string strCertPath, string strKeyPath, string strPassword)

### **Parameters**

[1]string the certificate configuration name

[2]string the certificate file path

[3]string the key file path

[4]string the key password

### **Return Values**

[1]bool return true if successfully added an SSL certificate configuration, otherwise return false

## Remarks

Add or modify an SSL certificate configuration.

## c\_DeleteSSLCertificate(string strName)

### **Parameters**

[1]string the certificate configuration name

#### **Return Values**

[1]bool return true if successfully deleted an SSL certificate configuration, otherwise return false

### Remarks

Delete an SSL certificate configuration.

**c\_CreateSSHKey**(string strFileName,string strFilePath,string strKeyPassword,int nKeySize,int nKeyType)

#### **Parameters**

[1]string the certificate file name

[2]string the output directory

[3]int the key password

[4]int key size

[5]int key type, 0=RSA, 1=DSA

#### **Return Values**

[1]bool return true if created SSH key file successfully, otherwise return false

#### Remarks

This function is used for creating an SSH key file.

## c\_GetSSHKeyList()

### **Parameters**

nil

### **Return Values**

[1]table the list of all SSH configuration (formated as {name,state})

#### Remarks

Return all the SSH key configurations.

## c\_GetSSHKey(string strName)

## **Parameters**

[1]string the SSH key configuration name

### **Return Values**

[1]table a table formated as {ssh\_keypath,ssh\_password}.

## Remarks

Get an SSH key configuration table on success, or nil on error.

## c\_CheckSSHKey(string strName)

## **Parameters**

[1]string the SSH key configuration name

## **Return Values**

[1]bool return true if SSH key is valid, otherwise return false

### Remarks

Check whether the specified SSH key is valid.

## c\_AddSSHKey(string strName,string strKeyPath,string strPassword)

#### **Parameters**

[1]string the certificate configuration name

[2]string the key file path

[3]string the ssh password

#### **Return Values**

[1]bool return true if added an SSH key configuration successfully, otherwise return false

#### Remarks

Add or modify an SSH key configuration.

# c\_DeleteSSHKey(string strName)

### **Parameters**

[1]string the SSH key configuration name

### **Return Values**

[1]bool return true if deleted an SSH key configuration successfully, otherwise return false

#### Remarks

Delete an SSH key configuration.

## c\_GetSMTPList()

## **Parameters**

nil

## **Return Values**

[1]string smtp configuration list.

### Remarks

Return all the smtp configurations, and configuration name in string is separated with a carriage return sign.

## c\_GetSMTP(string strName)

#### **Parameters**

[1]string the smtp configuration name

## **Return Values**

[1]table a table formatted as {sender\_name,sender\_email,need\_auth,smtp\_server,smtp\_port, smtp\_username,smtp\_password,use\_ssl}.

#### Remarks

Return an smtp configuration table on success, or nil on error.

**c\_AddSMTP**(string strName,string strSenderName,string strSenderEmail,bool bSmtpNeedAuth, string strSmtpServer,int nSmtpPort,string strSmtpUserName,string strSmtpPassword,bool bUseSsl)

#### **Parameters**

[1]string the smtp configure name

[2]string the sender's name

[3]string the sender's email address

[4]bool need auth?, true=yes,false=no.

[5]string the smtp server's address

[6]int the smtp server's port

[7]string the smtp server's username

[8]string the smtp server's password

[9]bool need SSL?, true=yes,false=no.

### **Return Values**

nil

### Remarks

Add or modify an smtp configuration.

# c\_DeleteSMTP(string strName)

### **Parameters**

[1]string the smtp configuration name

## **Return Values**

[1]bool return true if deleted an smtp configuration successfully, otherwise return false

### Remarks

Delete an smtp configuration.

## c GetTaskList()

#### **Parameters**

nil

## **Return Values**

[1]table the system task(formatted as {taskname,type,day,executed,datefrom,timefrom}) list table

### Remarks

Return all the system tasks.

# c\_GetTask(string strTaskName)

#### **Parameters**

[1]string the task scheduler name

#### **Return Values**

[1]table a table formatted as {taskname,type,day,executed,datefrom,timefrom,script}.

#### Remarks

Get a task scheduler table on success, or nil on error.

**c\_AddTask**(string strTaskName,int nType,int nDay,string strDatefrom,string strTimefrom,string strScript,bool bReset)

#### **Parameters**

[1]string the task scheduler name

[2]int the task scheduler type,0=one time task,1=hourly task,2=daily task,3=weekly task,4=monthly task

[3]int means the day number when you select weekly task or monthly task.

[4]string the date string of first starting task, such as 2009-9-9

[5]string the time string of first starting task, such as 09:09:09

[6]string the lua script text for the task.

[7]bool whether to reset the task, true=yes, false=no.

### **Return Values**

nil

#### Remarks

Add or modify a system task scheduler.

### c\_DeleteTask(string strTaskName)

#### **Parameters**

[1]string the task scheduler name

### **Return Values**

[1]bool return true if deleted system task scheduler successfully, otherwise return false

#### Remarks

Delete a system task scheduler.

### c\_TaskExist(string strTaskName)

### **Parameters**

[1]string the task scheduler name

### **Return Values**

[1]bool return true if the specified task scheduler exists, otherwise return false

#### Remarks

Check whether the specified task scheduler exists.

### 6.2.4 Get/Set Options

### c\_SetOptionInt(string strDomain,int nKey,int nValue)

#### **Parameters**

[1]string the domain name[2]int the key of domain option[3]int the integer value of domain option

#### **Return Values**

nil

### Remarks

Set the integer value of a domain option.

for example:

c\_SetOptionInt("domain", DOPTION\_DATA\_ACCESS\_INTERFACE\_INT, 1)

DOPTION\_DATA\_ACCESS\_INTERFACE\_INT is a macro definition of domain options, you can check them at the bottom.

### c\_SetOptionStr(string strDomain,int nKey,string strValue)

#### **Parameters**

[1]string the domain name

[2]int the key of domain option

[3]string the string value of domain option

#### **Return Values**

nil

#### Remarks

This function is similar to c\_SetOptionInt(), it is used for setting the string value of a domain option.

### c\_GetOptionInt(string strDomain,int nKey)

### **Parameters**

[1]string the domain name [2]int the key of domain option

#### **Return Values**

[1]int the integer value of domain option

### Remarks

Get the integer value of a domain option.

for example:

local interface = c\_GetOptionInt("domain", DOPTION\_DATA\_ACCESS\_INTERFACE\_INT)

### c\_GetOptionStr(string strDomain,int nKey)

### **Parameters**

[1]string the domain name [2]int the key of domain option

### **Return Values**

[1]string the string value of domain option

### Remarks

Get the string value of a domain option.

### c\_SetGlobalOptionInt(int nKey,int nValue)

#### **Parameters**

[1]int the key of global option

[2]int the integer value of global option

### **Return Values**

nil

#### Remarks

Set the integer value of a global option.

for example:

c SetGlobalOptionInt(GOPTION SYSTEM LOGFILE ENABLE INT, 1)

GOPTION\_SYSTEM\_LOGFILE\_ENABLE\_INT is a macro defination of global options, you can check them on the bottom..

### c\_SetGlobalOptionStr(int nKey,string strValue)

### **Parameters**

[1]int the key of global option

[2]string the string value of global option

#### **Return Values**

nil

#### Remarks

This function is similar to c\_SetGlobalOptionInt(), it is used for setting the string value of a global option.

### c\_GetGlobalOptionInt(int nKey)

### **Parameters**

[1]int the key of global option

### **Return Values**

[1]int the integer value of global option

#### Remarks

Get the integer value of a global option.

for example:

local enable\_systemlog = c\_GetGlobalOptionInt(GOPTION\_SYSTEM\_LOGFILE\_ENABLE\_INT)

### c\_GetGlobalOptionStr(int nKey)

#### **Parameters**

[1]int the key of global option

#### **Return Values**

[1]string the string value of global option

#### Remarks

Get the string value of a global option.

### c\_SetAdminOptionInt(int nKey,int nValue)

#### **Parameters**

[1]int the key of admin option

[2]int the integer value of admin option

### **Return Values**

nil

#### Remarks

Set the integer value of admin option.

for example:

c\_SetAdminOptionInt(ADMIN\_OPTION\_LOGFILE\_ENABLE\_INT, 1)

ADMIN\_OPTION\_LOGFILE\_ENABLE\_INT is a macro defination of admin options, you can check them on the bottom..

### c\_SetAdminOptionStr(int nKey,string strValue)

#### **Parameters**

[1]int the key of admin option

[2]string the string value of admin option

### **Return Values**

nil

#### Remarks

This function is similar to c\_SetAdminOptionInt(), it is used for setting the string value of an admin option.

### c\_GetAdminOptionInt(int nKey)

### **Parameters**

[1]int the key of admin option

### **Return Values**

[1]int the integer value of admin option

### **Remarks**

Get the integer value of an admin option.

#### for example:

local enable\_adminlog = c\_GetAdminOptionInt(ADMIN\_OPTION\_LOGFILE\_ENABLE\_INT)

### c\_GetAdminOptionStr(int nKey)

#### **Parameters**

[1]int the key of admin option

#### **Return Values**

[1]string the string value of admin option

#### Remarks

Get the string value of an admin option.

```
//Domain Option Field(used in c_SetOptionInt,c_SetOptionStr,c_GetOptionInt,c_GetOptionStr)
DOPTION DOMAIN MAX SESSION INT = 0
                                                //Maximum number of sessions on domain
DOPTION_DOMAIN_PER_IP_MAX_SESSION_INT = 1
                                                //Maximum sessions per IP address on
domain
DOPTION PER SESSION MAX DOWN SPEED INT = 2 //Maximum download speed per session
DOPTION_PER_SESSION_MAX_UP_SPEED_INT = 3
                                                //Maximum upload speed per session
                                                //Maximum download speed for domain
DOPTION DOMAIN MAX DOWN SPEED INT = 4
DOPTION DOMAIN MAX UP SPEED INT = 5
                                                //Maximum upload speed for domain
DOPTION_PER_USER_MAX_DOWN_SPEED_INT = 6
                                                //Maximum download speed for user accounts
DOPTION PER USER MAX UP SPEED INT = 7
                                                //Maximum upload speed for user accounts
DOPTION_PASSTYPE_INT = 8
                                                //FTP Pasv Mode
DOPTION_PASV_IP_REFRESH_INTERVAL_INT = 9
                                                //Update IP address interval for FTP Pasv
Mode
DOPTION FIXEDIP STR = 10
                                                //Fixed IP for FTP Pasy Mode
DOPTION WEB IP STR = 11
                                                //Web IP for FTP Pasv Mode
DOPTION_DNS_IP_STR = 12
                                                //Dynamic DNS for FTP Pasv Mode
DOPTION_ENABLE_UPNP = 13
                                                //Auto-forwarding domain listener ports to
router
DOPTION PASSPORTMIN INT = 14
                                                //FTP passive minimum port
DOPTION PASSPORTMAX INT = 15
                                                //FTP passive maximum port
DOPTION BUFFERSIZE INT = 16
                                                //Transfer buffer size
DOPTION_DATA_ACCESS_INTERFACE_INT = 17
                                                //Storage user/group data way
DOPTION MYSQL ADDRESS STR = 18
                                                //Mysql Server
DOPTION MYSQL PORT INT = 19
                                                //Mysql Server Port
DOPTION MYSQL USERNAME STR = 20
                                                //Mysql Username
DOPTION MYSQL PASSWORD STR = 21
                                                //Mysql Password
DOPTION MYSQL DBNAME STR = 22
                                                //Mysql Database
DOPTION_MYSQL_UNIXSOCKET_STR = 23
                                                //Mysql UnixSocket
                                                //ODBC Source
DOPTION DSN ADDRESS STR = 24
DOPTION_DSN_USERNAME_STR = 25
                                                //ODBC Username
DOPTION_DSN_PASSWORD_STR = 26
                                                //ODBC Password
DOPTION ENABLE MODEZ INT = 27
                                                //Enable FTP MODE Z support
DOPTION_DEFAULT_ZLEVEL_INT = 28
                                                //Defualt compression level
DOPTION_MIN_ZLEVEL_INT = 29
                                                //Minimum allowed compression level
```

```
DOPTION MAX ZLEVEL INT = 30
                                                  //Maximum allowed compression level
                                                  //Enable SFV Check
DOPTION ENABLE SFVCHECK INT = 31
DOPTION_SFVCHECK_CREATMISSING_INT = 32
                                                  //SFV create missing files(filename.missing)
DOPTION_SFVCHECK_BADFILE_INT = 33
                                                  //SFV Bad File Option
DOPTION SFVCHECK PROGRESS INT = 34
                                                  //SFV Check Progress Option
                                                  //SFV send the check result to client(only for
DOPTION SFVCHECK SENDRESULT INT = 35
DOPTION_ANTI_HAMMER_ENABLE_INT = 36
                                                  //Enable Anti-hammer
DOPTION ANTI HAMMER BLOCK TIME INT = 37
                                                  //Anti-hammer blocking time
DOPTION ANTI HAMMER LOGIN FAILED COUNTS INT = 38 //Anti-hammer failed login try
DOPTION ANTI HAMMER INTERVAL INT = 39
                                                  //Anti-hammer failed try time
DOPTION ANTI HAMMER SEND MESSAGE INT = 40 //Send hammering message to ftp client
DOPTION SSL NAME STR = 41
                                                  //SSL certificate name
DOPTION_SSH_NAME_STR = 42
                                                  //SSH key name
                                                  //Using UTF-8 for SSH
DOPTION_SSH_USE_UTF8 = 43
DOPTION SMTP NAME STR = 44
                                                  //SMTP config name
DOPTION ENABLE FXP INT = 45
                                                  //Enable FXP
DOPTION LOGFILE ENABLE INT = 46
                                                  //Enable domain log
DOPTION_LOGFILE_NAME_STR = 47
                                                  //Domain log's filename
DOPTION LOGFILE MAXSIZE INT = 48
                                                  //Domain log's max size
DOPTION LOGFILE MESSAGE INT = 49
                                                  //Log text field 'Message' enabled in file
DOPTION LOGSCREEN MESSAGE INT = 50
                                                  //Log text field 'Message' enabled in screen
DOPTION LOGFILE SECURITY INT = 51
                                                  //Log text field 'Security' enabled in file
DOPTION LOGSCREEN SECURITY INT = 52
                                                  //Log text field 'Security' enabled in screen
DOPTION_LOGFILE_FTP_COMMAND_INT = 53
                                                  //Log text field 'FTP Command' enabled in file
DOPTION_LOGSCREEN_FTP_COMMAND_INT = 54
                                                  //Log text field 'FTP Command' enabled in
DOPTION LOGFILE FTP RESPONSE INT = 55
                                                  //Log text field 'FTP Response' enabled in file
DOPTION LOGSCREEN FTP RESPONSE INT = 56
                                                  //Log text field 'FTP Response' enabled in
                                                  //Log text field 'WEB Command' enabled in file
DOPTION LOGFILE WEB COMMAND INT = 57
DOPTION LOGSCREEN WEB COMMAND INT = 58
                                                  //Log text field 'WEB Command' enabled in
DOPTION LOGFILE WEB RESPONSE INT = 59
                                                  //Log text field 'WEB Response' enabled in file
DOPTION LOGSCREEN WEB RESPONSE INT = 60
                                                  //Log text field 'WEB Response' enabled in
screen
DOPTION LOGFILE SSH COMMAND INT = 61
                                                  //Log text field 'SSH Command' enabled in file
                                                  //Log text field 'SSH Command' enabled in
DOPTION LOGSCREEN SSH COMMAND INT = 62
screen
DOPTION LOGFILE SSH RESPONSE INT = 63
                                                  //Log text field 'SSH Response' enabled in file
DOPTION_LOGSCREEN_SSH_RESPONSE_INT = 64
                                                  //Log text field 'SSH Response' enabled in
DOPTION LOGFILE ODBC ERROR INT = 65
                                                  //Log text field 'ODBC Error' enabled in file
DOPTION LOGSCREEN ODBC ERROR INT = 66
                                                  //Log text field 'ODBC Error' enabled in screen
DOPTION LOGFILE MYSQL ERROR INT = 67
                                                  //Log text field 'MYSQL Error' enabled in file
DOPTION_LOGSCREEN_MYSQL_ERROR_INT = 68
                                                  //Log text field 'MYSQL Error' enabled in
screen
DOPTION_LOGFILE_LUA_ERROR_INT = 69
                                                  //Log text field 'Lua Error' enabled in file
DOPTION LOGSCREEN LUA ERROR INT = 70
                                                  //Log text field 'Lua Error' enabled in screen
                                                  //Log text field 'Mail Error' enabled in file
DOPTION_LOGFILE_MAIL_ERROR_INT = 71
                                                  //Log text field 'Mail Error' enabled in screen
DOPTION LOGSCREEN MAIL ERROR INT = 72
DOPTION_LOGFILE_FILE_ERROR_INT = 73
                                                  //Log text field 'File Error' enabled in file
                                                  //Log text field 'File Error' enabled in screen
DOPTION LOGSCREEN FILE ERROR INT = 74
```

```
DOPTION LOGFILE NORMAL ERROR INT = 75
                                                //Log text field 'Normal Error' enabled in file
                                                //Log text field 'Normal Error' enabled in
DOPTION LOGSCREEN NORMAL ERROR INT = 76
screen
DOPTION_MESSAGE_WELCOME_STR = 77
                                                //FTP welcome message
DOPTION MESSAGE LOGIN STR = 78
                                                //FTP user login message
DOPTION_MESSAGE_CHANGE_DIR_STR = 79
                                                //FTP change directory message
DOPTION MESSAGE DIR LIST STR = 80
                                                //FTP directory list message
DOPTION_MESSAGE_FILE_UPLOAD_STR = 81
                                                //FTP file uploaded message
DOPTION MESSAGE FILE DOWNLOAD STR = 82
                                                //FTP file downloaded message
DOPTION MESSAGE SYSTEM COMMAND STR = 83 //FTP system command message
DOPTION MESSAGE QUIT COMMAND STR = 84
                                                //FTP user quit message
DOPTION_LISTENER_ENABLE_UPNP_INT = 85
                                                //Auto-forwarding domain listener ports to
router
DOPTION_PER_ACCOUNT_MAX_SESSIONS_INT = 86 //Maximum number of sessions per user
account
DOPTION PER ACCOUNT PER IP MAX SESSIONS INT = 87 //Maximum sessions per IP address
for user account
DOPTION COMMAND TIMEOUT INT = 88
                                                //Automatic idle connection timeout
DOPTION_TRANSFER_TIMEOUT_INT = 89
                                                //Automatic transfer connection timeout
```

### 6.2.5 Miscellaneous

md5(string strText)

#### **Parameters**

[1]string the original string

### **Return Values**

[1]string the md5 hash of a string

#### Remarks

Calculate the md5 hash of a string.

### c\_GetAppPath()

#### **Parameters**

nil

### **Return Values**

[1]string the application installation path

#### Remarks

Returns the absolute path where Wing FTP Server is installed.

### c IsDir(string strDirPath)

#### **Parameters**

[1]string the directory path

### **Return Values**

[1]bool return true if strDirPath is an existing directory, otherwise return false

### **Remarks**

Tells whether the path is a real directory.

### c\_MkDir(string strDirPath)

### **Parameters**

[1]string the directory path

#### **Return Values**

[1]bool return true if created a directory successfully, otherwise return false

#### Remarks

Attempts to make a directory specified by strPath.

### c\_RemoveFileDir(string strPath)

#### **Parameters**

[1]string the directory path

### **Return Values**

[1]bool return true if removed a file or a directory successfully, otherwise return false

#### Remarks

Attempts to remove a file or directory specified by strPath.

### c\_FileExist(string strFilePath)

### **Parameters**

[1]string the file path

### **Return Values**

[1]bool return true if strFilePath is a regular file, otherwise return false

### Remarks

Check whether a regular file exists.

### c\_GetFileTime(string strFilePath)

### **Parameters**

[1]string the file path

### **Return Values**

[1]int the time when file content was changed

### **Remarks**

Get the time when file content was changed.

### c\_GetTimeMS()

#### **Parameters**

nil

#### **Return Values**

[1]int the milliseconds of current time

#### Remarks

Get the milliseconds of current time.

### c\_GetTimeUS()

### **Parameters**

nil

#### **Return Values**

[1]int the microseconds of current time

#### Remarks

Get the microseconds of current time.

### c\_GetRandom()

### **Parameters**

nil

### **Return Values**

[1]int the random number

### Remarks

Generate a system random number.

### c\_GetDir(string strDirPath)

### **Parameters**

[1]string the directory path

### **Return Values**

[1]string return an iterative directory name when no exception occurred, otherwise return nil.

### Remarks

Returns an iterative directory name inside the specified path strDirPath. So you can use this function for directory traversal,

for example:

for subdir in c\_GetDir(rootpath) do
 print(subdir)

end

### c\_GetFileDir(string strDirPath)

#### **Parameters**

[1]string the directory path

#### **Return Values**

[1]string return an iterative directory/file name when no exception occurred, otherwise return nil.

#### Remarks

Returns an iterative directory/file name inside the specified path strDirPath. So you can use this function for directory/file traversal,

```
for example:
for subdirfile in c_GetFileDir(rootpath) do
print(subdirfile)
end
```

### c\_GetRootDir()

#### **Parameters**

nil

### **Return Values**

[1]table a table list of local drivers in windows, and in other OS its subdirectory table under "/"

### Remarks

```
Return local drivers string table in windows, subdirectory table under "/" in other OS. for example:
for _,root_sub in pairs(c_GetRootDir()) do
    if root_sub ~= nil and root_sub["isdir"] == true then
        print(root_sub["dir"])
    end
end
```

### c\_GetLocallpList()

### **Parameters**

nil

#### **Return Values**

[1]string the local IP list string

### Remarks

Returns the local IP list, and IP in string is separated with a comma sign.

### c\_TranslateTime(string strTime)

### **Parameters**

[1]string the time string, such as "2009-09-09 00:00:00"

#### **Return Values**

[1]int time\_t value of the time

### **Remarks**

Translate a time string to a time\_t value .

### 6.2.6 Administrator

### c\_CheckAdmin(string strUserName,string strPassword)

### **Parameters**

[1]string admin username [2]string admin password

### **Return Values**

[1]bool return true if check administrator login is successful, otherwise return false

### Remarks

Administrator login ok?

### c\_CheckAdminIp(string strUserName,string strIp)

#### **Parameters**

[1]string admin username [2]string the client IP

#### **Return Values**

[1]bool return false when IP is banned, otherwise return true

### Remarks

Check administrator login IP.

### c\_AdminLogout(string strSessionId)

### **Parameters**

[1]string the session ID

#### **Return Values**

nil

### Remarks

Administrator logout.

### c\_AdminExist(string strUserName)

### **Parameters**

[1]string admin username

### **Return Values**

[1]bool return true if specified admin exists, otherwise return false

### Remarks

Check whether the specified administrator exists.

**c\_AddAdmin**(string strUserName, string strPassword, bool bReadonly, table tabAdminlpmasks)

#### **Parameters**

[1]string admin username

[2]string admin password

[3]bool is read-only admin?

[4]table administrator's IPmask(formated as {ip,refuse}) list table.

#### **Return Values**

nil

#### Remarks

Add or modify an administrator.

### c\_DeleteAdmin(string strUserName)

#### **Parameters**

[1]string admin username

#### **Return Values**

nil

#### Remarks

Delete an administrator.

### c\_GetAdmin(string strUsername)

#### **Parameters**

[1]string admin username

### **Return Values**

[1]table administrator data table formated as {username,password,{lpmask table}}.

#### Remarks

Return an administrator data table if the specified admin exists, otherwise return nil.

### c\_GetAdminType()

#### **Parameters**

[1]string the administrator name

### **Return Values**

[1]bool return true if administrator is read-only admin, otherwise return false

#### Remarks

Get the administrator type.

### c\_GetAdminList()

#### **Parameters**

nil

### **Return Values**

[1]table administrator(formated as {username,lastlogin,lastip}) list table.

### Remarks

Return administrators list.

### c\_AddAdminFailedlp(string strlp)

### **Parameters**

[1]string client IP

### **Return Values**

nil

#### Remarks

Add the client IP to a banned list when login failed, for system anti-hammer.

### c\_RemoveAdminFailedIp(string strlp)

### **Parameters**

[1]string the client IP

### **Return Values**

nil

### Remarks

Remove the specified IP from banned list when login is successful, for system anti-hammer.

### c\_ClearAdminSession()

### **Parameters**

nil

### **Return Values**

nil

### Remarks

Clear all the expired admin sessions.

### c\_ChangeAdminListener(int nHttpPort,bool bHttpSecure)

### **Parameters**

[1]int administration listener's port

[1]bool whether to use SSL, 1=yes, 0=no

### **Return Values**

[1]bool return true if change listener successfully, otherwise return false

#### Remarks

Modify the administrator's listener.

### c\_GetAdminIPMaskList()

#### **Parameters**

nil

#### **Return Values**

[1]table the administrator IPmask(formated as {ip,refuse}) list table

#### Remarks

Return administrator IPmask list.

### c\_SetAdminIPMaskList(table tablpmask)

### **Parameters**

[1]table the administrator IPmask(formated as {ip,refuse}) list table

### **Return Values**

nil

### Remarks

Set administrator IPmask list.

### c\_GetAdminLog()

### **Parameters**

nil

### **Return Values**

[1]string admin log text

### Remarks

Get all the admin log text.

### c\_AddAdminLog(string strLog,int nType)

### **Parameters**

[1]string the admin log text

[2]int the admin log type, you can check them at the bottom.

#### **Return Values**

nil

### Remarks

Add an admin log.

### 6.3 Server Variables

Certain configurable messages in the server can be customized to include a wide range of variables as outlined in the list below. These variables can be used in the Command Console, the Event Manager, and for customized FTP response message. A brief explanation is made for each variable. Statistical information, unless otherwise specified, is calculated since the server was last started.

#### Server Variables

```
%ServerName - The full name of the server
```

%ServerVersion - The full version number of the server

%CurrentTime - The current time according to the server, in the system's local time format

%ServerYear - Current year

%ServerMonth - Current month, 1-12

%ServerDay - Current day, 1-31

%ServerHour - Current hour, 0-23

%YYYY - Current year

%MM - Current month, 01-12

%DD - Current day, 01-31

%HH - Current hour, 00-23

 $\mbox{\%ServOnlineSessions}$  - The number of sessions currently connected

%SerMaxOnlineSessions - The highest number of concurrent sessions that has been recorded since being placed online

%ServLast24HSessions - The number of sessions that have connected in the past 24 hours

%ServAverageSessionLife - The average length of time a session has remained connected

%SerMaxSessionLife - The longest recorded time for a session

%ServTotalSessions -The total number of sessions that have connected since being placed online.

%ServRealtimeDownloadSpeedKBS - The current download transfer rate in KB/s

%ServAverageDownloadSpeedKBS - The average download rate in KB/s

%ServDownloadBytes - The total amount of data downloaded since being placed online

%ServDownloadFiles - The total number of files downloaded since being placed online

%ServRealtimeUploadSpeedKBS - The current upload transfer rate in KB/s

%ServAverageUploadSpeedKBS - The average upload rate in KB/s

%ServUploadBytes - The total amount of data uploaded since being placed online

%ServUploadFiles - The total number of files uploaded since being placed online

#### **Domain Variables**

%DomOnlineSessions - The number of sessions currently connected

%DomMaxOnlineSessions - The highest number of concurrent sessions that has been recorded since being placed online

%DomLast24HSessions - The number of sessions that have connected in the past 24 hours

%DomAverageSessionLife - The average length of time a session has remained connected

%DomMaxSessionLife - The longest recorded time for a session

%DomTotalSessions - The total number of sessions that have connected since being placed online

%DomRealtimeDownloadSpeedKBS - The current download transfer rate in KB/s

%DomAverageDownloadSpeedKBS - The average download rate in KB/s

%DomDownloadBytes - The total amount of data downloaded since being placed online

%DomDownloadFiles - The total number of files downloaded since being placed online

%DomRealtimeUploadSpeedKBS - The current upload transfer rate in KB/s

%DomAverageUploadSpeedKBS - The average upload rate in KB/s

%DomUploadBytes - The total amount of data uploaded since being placed online

%DomUploadFiles - The total number of files uploaded since being placed online

### Session Variables - Applies to the current session

%Domain - The domain name

%IP - The client's IP address

%Name - The session's User Name

"% "UserEmail" - The email address of the user "Name, which specified in the User->Notes page

%Dir - The session's current directory

%LastDir - The last created or removed directory (physical path)

%PathName - The last accessed file's path.

%FileName - The last accessed file's name, like "test.zip"

%FileSize - Retrieves the size, in bytes, of the file from %PathName

%OldFilePath - The old file path before renaming

%NewFilePath - The new file path after renaming

%SessionID - The session's ID

%ClientVersion - The FTP client name

%UserMaxQuota - The max disk quota for the user %Name

%UserCurrentQuota - The current disk quota for the user %Name

%ConRealtimeDownloadSpeedKBS - The current download transfer rate in KB/s

%ConAverageDownloadSpeedKBS - The average download rate in KB/s

%ConDownloadFiles - The total number of files downloaded for this session

%ConRealtimeUploadSpeedKBS - The current upload transfer rate in KB/s

%ConAverageUploadSpeedKBS - The average upload rate in KB/s

%ConUploadFiles - The total number of files uploaded for this session

%ConTransferBytes - The total amount of data transferred last time by this session(include download and upload)

%ConTransferSpeedKBS - The average transfer rate transferred last time by this session in KB/s

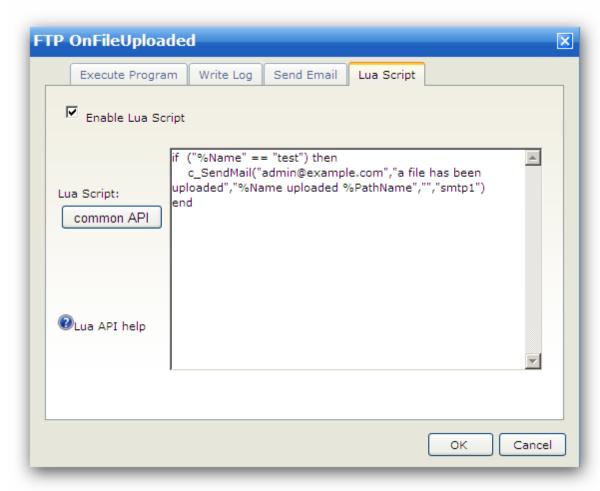
### How to use Variables in Command Console and Task Scheduler

Only Server Variables are applicable in Command Console and Task Scheduler. You can not use Domain Variables and Session Variables.



### How To use Variables in Event Manager and FTP Customized Message

All Variables are applicable in Event Manager and FTP Customized Message.



This example shows how to respond to events for a specified user. In this case, when user "test" uploads a file, the server will send an email to admin@example.com.

### 6.4 Database Schema

Note: You needn't to create database schemas or tables by yourself, Wing FTP Server will create them automatically when configuring ODBC/Mysql settings(if you use Mysql, please create a mysql database first, the default database name is "wftp\_database").

## Schemas for ODBC database

1) table for mapping relations of user and group(wftp\_table\_user\_group)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
Group_Name	varchar (64)	NOT NULL	the group name

2) table for user information(wftp\_table\_user)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
EnableAccount	int		enable account?,1=yes,0=no
EnablePassword	int		enable password?,1=yes,0=no
Password	varchar (64)	NOT NULL	the user password
ProtocolType	int		enabled protocols mask, FTP=1,FTP(TLS)=2,FTP (SSL)=4,HTTP=8,HTTP(SSL)=16,SSH=32,if only allow FTP and HTTP, the mask number is 1+8 = 9
EnableExpire	int		enable account expire?,1=yes,0=no
ExpireTime	varchar (32)		the account expire time, such as "2009-09-09 00:00:00"
MaxDownloadSpeed	int		max session download speed
MaxUploadSpeed	int		max session upload speed
MaxConnection	int		max number of connections

Field Name	Туре	NULL	Description
SessionNoCommandTim eOut	int		ftp connection timeout value
SessionNoTransferTimeO ut	int		ftp idle timeout value
ConnectionPerlp	int		max number of connections per lp
PasswordLength	int		max password length
ShowHiddenFile	int		show the hidden file?, 1=show,0=hide
CanChangePassword	int		user can change password?, 1=allow,0=deny
CanSendMessageToServ er	int		send chat message?, 1=allow,0=deny
CurrentCredit	varchar (64)		current ratio credit
RatioDownload	int		ratio download
RatioUpload	int		ratio upload
RatioCountMethod	int		ratio count method,0=count for files,1=count for bytes
EnableRatio	int		enable ratio?, 1=yes,0=no
MaxQuota	varchar (64)		max quota size
CurrentQuota	varchar (64)		current quota size
EnableQuota	int		enable quota?, 1=yes,0=no
NotesName	varchar (64)		note name text
NotesAddress	varchar (255)		note address text
NotesZipCode	varchar (64)		note zipcode text
NotesPhone	varchar (64)		note phone number text
NotesFax	varchar (64)		note fax number text
NotesEmail	varchar (128)		note email text
NotesMemo	varchar (255)		note memo text
TotalReceivedBytes	varchar (64)		total received bytes
TotalSentBytes	varchar (64)		total sent bytes
LoginCount	int		login count
FileDownload	int		total downloaded files
FileUpload	int		total uploaded files
FailedDownload	int		total download failed files
FailedUpload	int		total upload failed files
LastLoginlp	varchar (64)		the last login IP
LastLoginTime	varchar (64)		the last login time
EnableGroup	int		enable group?, 1=yes,0=no
EnableSchedule	int		enable access schedule?, 1=yes,0=no
LimitResetTime	int		transfer limit reset time

Field Name	Туре	NULL	Description
LimitResetType	int		transfer limit reset type, 0=reset never,1=reset hourly,2=reset daily,3=reset weekly,4=reset monthly
EnableUploadLimit	int		enable transfer limit upload?, 1=yes,0=no
CurLimitUploadSize	int		current upload size
MaxLimitUploadSize	int		max upload size
EnableDownloadLimit	int		enable transfer limit download?, 1=yes,0=no
CurLimitDownLoadSize	int		current download size
MaxLimitDownloadSize	int		max download size
SSHPublicKeyPath	varchar (255)		SSH public key path (optional)

## 3) table for user's directory(wftp\_table\_dir)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
DirPath	varchar (255)	NOT NULL	the directory real path
DirAlias	varchar (128)		the directory virtual path
Home_Dir	int		is home directory?, 1=yes,0=no
File_Read	int		enable file read?, 1=yes,0=no
File_Write	int		enable file write?, 1=yes,0=no
File_Append	int		enable file append?, 1=yes,0=no
File_Delete	int		enable file delete?, 1=yes,0=no
Directory_List	int		enable directory list?, 1=yes,0=no
Directory_Rename	int		enable directory/file rename?, 1=yes,0=no
Directory_Make	int		enable directory create?, 1=yes,0=no
Directory_Delete	int		enable directory delete?, 1=yes,0=no
File_Rename	int		enable file rename?, 1=yes,0=no
Zip_File	int		enable zip files?, 1=yes,0=no
Unzip_File	int		enable unzip files?, 1=yes,0=no

4) table for user's filemask(wftp\_table\_filemask)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
Filename	varchar (128)	NOT NULL	the file mask
Refuse	int		refuse access?, 1=yes,0=no

## 5) table for user's ipmask(wftp\_table\_ipmask)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
lp	varchar (128)	NOT NULL	the ip mask
Refuse	int		refuse access?, 1=yes,0=no

## 6) table for user's access schedule(wftp\_table\_schedule)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
Weekday	int		the day for access schedule. 0=Sunday, 1=Monday, 2=Tuesday, 3=Wednesday, 4=Thurs day, 5=Fri day, 6=Saturday
TimeFrom	varchar (32)		start time for access
TimeTo	varchar (32)		end time for access

## 7) table for group information(wftp\_table\_group)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
Group_Name	varchar (64)	NOT	the group name

Field Name	Туре	NULL	Description
		NULL	
MaxDownloadSpeed	int		max session download speed
MaxUploadSpeed	int		max session upload speed
MaxConnection	int		max number of connections
SessionNoCommandTim eOut	int		ftp connection timeout value
SessionNoTransferTimeO ut	int		ftp idle timeout value
ConnectionPerlp	int		max number of connections per lp
ShowHiddenFile	int		show the hidden file?, 1=show,0=hide
CanSendMessageToServ er	int		send chat message?, 1=allow,0=deny
TotalReceivedBytes	varchar (64)		total received bytes
TotalSentBytes	varchar (64)		total sent bytes
LoginCount	int		login count
FileDownload	int		total downloaded files
FileUpload	int		total uploaded files
FailedDownload	int		total download failed files
FailedUpload	int		total upload failed files

## 8) table for group's directory(wftp\_table\_dir2)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
Group_Name	varchar (64)	NOT NULL	the group name
DirPath	varchar (255)	NOT NULL	the directory real path
DirAlias	varchar (128)		the directory virtual path
Home_Dir	int		is home directory?, 1=yes,0=no
File_Read	int		enable file read?, 1=yes,0=no
File_Write	int		enable file write?, 1=yes,0=no
File_Append	int		enable file append?, 1=yes,0=no
File_Delete	int		enable file delete?, 1=yes,0=no
Directory_List	int		enable directory list?, 1=yes,0=no
Directory_Rename	int		enable directory/file rename?, 1=yes,0=no
Directory_Make	int		enable directory create?, 1=yes,0=no

Field Name	Туре	NULL	Description
Directory_Delete	int		enable directory delete?, 1=yes,0=no
File_Rename	int		enable file rename?, 1=yes,0=no
Zip_File	int		enable zip files?, 1=yes,0=no
Unzip_File	int		enable unzip files?, 1=yes,0=no

## 9) table for group's filemask(wftp\_table\_filemask2)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
Group_Name	varchar (64)	NOT NULL	the group name
Filename	varchar (128)	NOT NULL	the file mask
Refuse	int		refuse access?, 1=yes,0=no

## 10) table for group's ipmask(wftp\_table\_ipmask2)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
Group_Name	varchar (64)	NOT NULL	the group name
lp	varchar (128)	NOT NULL	the ip mask
Refuse	int		refuse access?, 1=yes,0=no

# **Schemas for Mysql database**

1) table for mapping relations of user and group(wftp\_mysqltable\_user\_group)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
Group_Name	varchar (64)	NOT NULL	the group name

## 2) table for user information(wftp\_mysqltable\_user)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
EnableAccount	int(11)		enable account?,1=yes,0=no
EnablePassword	int(11)		enable password?,1=yes,0=no
Password	varchar (64)	NOT NULL	the user password
ProtocolType	int(11)		enabled protocols mask, FTP=1,FTP(TLS)=2,FTP (SSL)=4,HTTP=8,HTTP(SSL)=16,SSH=32,if only allow FTP and HTTP, the mask number is 1+8 = 9
EnableExpire	int(11)		enable account expire?,1=yes,0=no
ExpireTime	varchar (32)		the account expire time, such as "2009-09-09 00:00:00"
MaxDownloadSpeed	int(11)		max session download speed
MaxUploadSpeed	int(11)		max session upload speed
MaxConnection	int(11)		max number of connections
SessionNoCommandTim eOut	int(11)		ftp connection timeout value
SessionNoTransferTimeO ut	int(11)		ftp idle timeout value
ConnectionPerlp	int(11)		max number of connections per lp
PasswordLength	int(11)		max password length
ShowHiddenFile	int(11)		show the hidden file?, 1=show,0=hide
CanChangePassword	int(11)		user can change password?, 1=allow,0=deny
CanSendMessageToServ er	int(11)		send chat message?, 1=allow,0=deny
CurrentCredit	bigint(20)		current ratio credit
RatioDownload	int(11)		ratio download

Field Name	Туре	NULL	Description
RatioUpload	int(11)		ratio upload
RatioCountMethod	int(11)		ratio count method,0=count for files,1=count for bytes
EnableRatio	int(11)		enable ratio?, 1=yes,0=no
MaxQuota	bigint(20)		max quota size
CurrentQuota	bigint(20)		current quota size
EnableQuota	int(11)		enable quota?, 1=yes,0=no
NotesName	varchar (64)		note name text
NotesAddress	varchar (255)		note address text
NotesZipCode	varchar (64)		note zipcode text
NotesPhone	varchar (64)		note phone number text
NotesFax	varchar (64)		note fax number text
NotesEmail	varchar (128)		note email text
NotesMemo	varchar (255)		note memo text
TotalReceivedBytes	bigint(20)		total received bytes
TotalSentBytes	bigint(20)		total sent bytes
LoginCount	int(11)		login count
FileDownload	int(11)		total downloaded files
FileUpload	int(11)		total uploaded files
FailedDownload	int(11)		total download failed files
FailedUpload	int(11)		total upload failed files
LastLoginlp	varchar (64)		the last login IP
LastLoginTime	varchar (64)		the last login time
EnableGroup	int(11)		enable group?, 1=yes,0=no
EnableSchedule	int(11)		enable access schedule?, 1=yes,0=no
LimitResetTime	int(11)		transfer limit reset time
LimitResetType	int(11)		transfer limit reset type, 0=reset never,1=reset hourly,2=reset daily,3=reset weekly,4=reset monthly
EnableUploadLimit	int(11)		enable transfer limit upload?, 1=yes,0=no
CurLimitUploadSize	int(11)		current upload size
MaxLimitUploadSize	int(11)		max upload size
EnableDownloadLimit	int(11)		enable transfer limit download?, 1=yes,0=no
CurLimitDownLoadSize	int(11)		current download size
MaxLimitDownloadSize	int(11)		max download size
SSHPublicKeyPath	varchar (255)		SSH public key path (optional)

## 3) table for user's directory(wftp\_mysqltable\_dir)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
DirPath	varchar (255)	NOT NULL	the directory real path
DirAlias	varchar (128)		the directory virtual path
Home_Dir	int(11)		is home directory?, 1=yes,0=no
File_Read	int(11)		enable file read?, 1=yes,0=no
File_Write	int(11)		enable file write?, 1=yes,0=no
File_Append	int(11)		enable file append?, 1=yes,0=no
File_Delete	int(11)		enable file delete?, 1=yes,0=no
Directory_List	int(11)		enable directory list?, 1=yes,0=no
Directory_Rename	int(11)		enable directory/file rename?, 1=yes,0=no
Directory_Make	int(11)		enable directory create?, 1=yes,0=no
Directory_Delete	int(11)		enable directory delete?, 1=yes,0=no
File_Rename	int(11)		enable file rename?, 1=yes,0=no
Zip_File	int(11)		enable zip files?, 1=yes,0=no
Unzip_File	int(11)		enable unzip files?, 1=yes,0=no

## 4) table for user's filemask(wftp\_mysqltable\_filemask)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
Filename	varchar (128)	NOT NULL	the file mask
Refuse	int(11)		refuse access?, 1=yes,0=no

## 5) table for user's ipmask(wftp\_mysqltable\_ipmask)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT	the domain name

Field Name	Туре	NULL	Description
		NULL	
User_Name	varchar (64)	NOT NULL	the user name
lp	varchar (128)	NOT NULL	the ip mask
Refuse	int(11)		refuse access?, 1=yes,0=no

## 6) table for user's access schedule(wftp\_mysqltable\_schedule)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
User_Name	varchar (64)	NOT NULL	the user name
Weekday	int(11)		the day for access schedule. 0=Sunday, 1=Monday, 2=Tuesday, 3=Wednesday, 4=Thurs day, 5=Fri day, 6=Saturday
TimeFrom	varchar (32)		start time for access
TimeTo	varchar (32)		end time for access

# 7) table for group information(wftp\_mysqltable\_group)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
Group_Name	varchar (64)	NOT NULL	the group name
MaxDownloadSpeed	int(11)		max session download speed
MaxUploadSpeed	int(11)		max session upload speed
MaxConnection	int(11)		max number of connections
SessionNoCommandTim eOut	int(11)		ftp connection timeout value
SessionNoTransferTimeO ut	int(11)		ftp idle timeout value
ConnectionPerlp	int(11)		max number of connections per lp
ShowHiddenFile	int(11)		show the hidden file?, 1=show,0=hide
CanSendMessageToServ er	int(11)		send chat message?, 1=allow,0=deny
TotalReceivedBytes	bigint(20)		total received bytes

Field Name	Туре	NULL	Description
TotalSentBytes	bigint(20)		total sent bytes
LoginCount	int(11)		login count
FileDownload	int(11)		total downloaded files
FileUpload	int(11)		total uploaded files
FailedDownload	int(11)		total download failed files
FailedUpload	int(11)		total upload failed files

## 8) table for group's directory(wftp\_mysqltable\_dir2)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
Group_Name	varchar (64)	NOT NULL	the group name
DirPath	varchar (255)	NOT NULL	the directory real path
DirAlias	varchar (128)		the directory virtual path
Home_Dir	int(11)		is home directory?, 1=yes,0=no
File_Read	int(11)		enable file read?, 1=yes,0=no
File_Write	int(11)		enable file write?, 1=yes,0=no
File_Append	int(11)		enable file append?, 1=yes,0=no
File_Delete	int(11)		enable file delete?, 1=yes,0=no
Directory_List	int(11)		enable directory list?, 1=yes,0=no
Directory_Rename	int(11)		enable directory/file rename?, 1=yes,0=no
Directory_Make	int(11)		enable directory create?, 1=yes,0=no
Directory_Delete	int(11)		enable directory delete?, 1=yes,0=no
File_Rename	int(11)		enable file rename?, 1=yes,0=no
Zip_File	int(11)		enable zip files?, 1=yes,0=no
Unzip_File	int(11)		enable unzip files?, 1=yes,0=no

## 9) table for group's filemask(wftp\_mysqltable\_filemask2)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
Group_Name	varchar (64)	NOT	the group name

Field Name	Туре	NULL	Description
		NULL	
Filename	varchar (128)	NOT	the file mask
		NULL	
Refuse	int(11)		refuse access?, 1=yes,0=no

### 10) table for group's ipmask(wftp\_mysqltable\_ipmask2)

Field Name	Туре	NULL	Description
Domain	varchar (64)	NOT NULL	the domain name
Group_Name	varchar (64)	NOT NULL	the group name
lp	varchar (128)	NOT NULL	the ip mask
Refuse	int(11)		refuse access?, 1=yes,0=no

## 6.5 Database Example

Here is an example for creating FTP accounts in PHPBB that every user registered in the forum can have an FTP account with his username and password, and the user data is stored via Mysql database, with which you can easily modify some user data fields by yourself, such as the 'expire time', 'upload quota', 'upload speed'...check out database schema reference | 162|, if necessary.

In this example, we use PHPBB version 3.0, and you would look for, in the source file "includes/ucp/ucp\_register.php", the code:

```
$user_id = user_add($user_row, $cp_data);
```

then add the codes below directly after it.

```
//Wing FTP Server MOD start
$ftp_dbname = "wftp_database";
                                           //Wing FTP Server's mysql database name,
assume in the same server.
$ftp domain name = "default";
                                           //ftp's domain name.
$ftp_dirpath = "D:/ftp_data/".$data['username'];//user's directory path
                                          //whether to limit the quota size
$ftp_upload_limit = TRUE;
$ftp_maxuoload_size = 1024*1024*100;
                                          //if $ftp_upload_limit = TRUE, this
value means the max quota bytes.
$db->sql_query("USE ".$ftp_dbname.";");
$db->sql_query("INSERT INTO `wftp_mysqltable_user` VALUES ('".$ftp_domain_name."','".
$data['username']."',1,1,'".md5($data['new_password'])."',63,0,
NULL,0,0,0,0,0,0,0,0,".".intval($ftp_upload_limit).",0,".
$ftp_maxuoload_size.",0,0,0,'');");
$mkdir_result = @mkdir($ftp_dirpath);
if($mkdir_result == TRUE)
  $db->sql_query("INSERT INTO `wftp_mysqltable_dir` VALUES ('".$ftp_domain_name."','"
.$data['username']."','".$ftp_dirpath."','/',1,1,1,1,1,1,1,1,1,1,1,1,1);");
$db->sql_query("USE ".$db->dbname.";");
```

//Wing FTP Server end

Note: Adding/editing user account by SQL operation is not a recommended method, we suggest you use Lua webservice to make it.